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SUBMISSION

of

THE UNIVERSITY OF WESTERN ONTARIO

to

THE COMMITTEE ON UNIVERSITY AFFAIRS

OCTOBER

1970

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Prepared by THE COMMITTEE ON OPERATIONAL PLANNING

"I know you believe you understand what you think I said, but I'm not sure you realize that what you heard is not what I meant."

. . . . ANON.

C O M M I T T E E O N O P E R A T I O N A L P L A N N I N G

1 9 7 0

INTRODUCTION

This report is one further instalment in the continuing effort of the University of Western Ontario to reappraise itself and its academic programs. During the academic years 1965-66 and 1966-67 the University undertook a comprehensive study of its government with the resulting University of Western Ontario Act of 1967. Under this statute the Senate became an academic body controlled by elected Faculty members, with student representation. The reformed Senate was given well defined and greatly increased powers including the right to advise the Board of Governors on financial matters and on the over-all development of the campus.

The Report was drawn up by the Committee on Operational Planning which has now been constituted as a Standing Committee of Senate with the following membership:

Chairman and two members, Senate Budget and Finance Committee

Chairman and two members, Senate Committee on University Development

Chairman and two members, Senate Committee on Admissions and Academic Programs
Policy

President, University Students' Council

President, Society of Graduate Students

ex officio: President and Vice-Chancellor

Vice-President (Academic) and Provost

Vice-President, Administration and Finance.

The Committee has been meeting regularly since June, 1970, to consider the Agenda Items outlined in the letter of May 29th, 1970, from Dr. E. E. Stewart, Secretary, Committee on University Affairs to Dr. D. C. Williams, President and Vice-Chancellor of the University of Western Ontario.

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During the deliberations of the Committee the following have been consulted:

Vice-President(Health Sciences), Deans of all Academic Units, Department Chairmen, Chairmen of major Senate Committees, Chairman of Joint Housing Committee, President of University Students' Council, President of Society of Graduate Students, President of M.B.A. Association, Academic Commissioner, University Research Officer, Registrar, Admissions Officer, Dean of Men, Comptroller, Director of Physical Plant, Superintendent of Buildings and Grounds, Director of Office of Information Analysis, Associate Director of Office of Information Analysis.

The Report has been discussed by both the Senate and the Board of Governors.

AGENDA ITEM -

1. Review of Current Programs

- (a) *Description of efforts by the University to co-ordinate program offerings with other Provincially-Assisted Universities:*
 - (i) *At the undergraduate level.*

To obtain a consensus of the University for response to this question, the Departments of the three major undergraduate Faculties were invited to submit statements. In addition, the Deans of the Professional Faculties or Schools in which there are undergraduate programs were requested to express their views.

Throughout the University considerable effort has been expended in attempts to co-ordinate our undergraduate programs with those offered by other Universities in the Province. It is difficult, if not impossible, to evaluate at this time the benefits to the University, to the students, or to the Province, of the efforts directed towards co-ordination in undergraduate programs. There is, however, a clear indication that in certain areas (e.g. admissions, maintenance of standards for purposes of accreditation, etc.), efforts are well advanced towards co-ordinating activities among the Universities in the Province. Such co-ordination is particularly well exemplified in the Health Science areas and in Engineering Science.

With reference to efforts to co-ordinate the curricula of undergraduate programs, so far activities have been initiated and pursued wholly within the discipline areas. Consequently, while a modicum of planning has resulted from detailed discussions in some disciplines, in others the spadework necessary to evaluate the possibilities of co-ordination has not yet begun. Among the former group, several of the disciplines in the Natural Sciences have reported on Province-wide committees which meet at regular intervals (e.g. Biochemistry, Chemistry, Biology). At least one of these groups (Biology) has presented a plan to co-ordinate course offerings in summer sessions involving several Provincially-assisted Universities.

In summary, wide-spread interest exists among the Faculty at Western to examine and implement where possible co-ordinated efforts in undergraduate programs.

Limited progress for exchange of members of Faculty with other Ontario Universities are operative in a number of disciplines (e.g. Engineering Science, English, Philosophy).

Recently, Senate endorsed the principle of discipline assessment as formulated in the CPUO "Proposal for an Advisory Sub-Committee in Academic Planning" (Circuletter 598, April 9, 1970). While recommending to CPUO that the discipline assessment be conducted at the graduate level only for a trial period, Senate further recommended that each of the discipline groups be persuaded to initiate or continue the collection and collation of the factual data required for assessment. These activities, once commenced, may strengthen the possibility of further co-ordination.

AGENDA ITEM -

1. Review of Current Programs

- (a) *Description of efforts by the University to co-ordinate program offerings with other Provincially-assisted Universities:*
 - (ii) *At the graduate level.*

The response of this University to Item 1. (a)(ii) is to be found in Table I. The Table complements, from the point of view of Western, the comprehensive report on the activities of Discipline Groups prepared by the Advisory Committee on Academic Planning of the Ontario Council on Graduate Studies.

The University has consistently gone on record as favouring co-operation among the Ontario Universities in graduate studies.

TABLE I

CO-ORDINATION OF PROGRAM OFFERINGS
WITH OTHER PROVINCIALLY-ASSISTED UNIVERSITIES
AT THE GRADUATE LEVEL

ARTS DIVISION

- Classics - Chairmen of Departments have met annually for the past three years, producing a tacit agreement that certain areas of graduate instruction will be emphasized at certain Universities.
- English - Since the Department requires the passing of a comprehensive examination as part of its M.A. program, and, at the end of the course work for the Ph.D., a set of qualifying examinations in the student's choice of four of the seven traditional areas, it offers graduate courses in every area, plus additional courses in its four recognized areas of excellence.
- The Department has already gone on record that it favours the idea of organizing summer institutes on a regional basis. It is willing to allow students already enrolled in graduate programs in other Universities into graduate courses in the Department, provided such students meet the admission requirements; indeed, such co-operation has already taken place with the University of Toronto on a reciprocal basis.
- German - Informal attempts during last four years to co-ordinate course offerings at graduate level, and library ordering. Twentieth and Seventeenth centuries of German Literature generally recognized as preserves of this University.
- Music - There is little liaison at present between the Faculty of Music and the University of Toronto, the only other Ontario University offering graduate work in Music. Our offerings were designed to fill voids that we felt were apparent in the Toronto program. Western alone offers the following:
- (1) A Masters Degree in Performance and Literature. This was an area of real need in the Canadian context and the applications for enrolment in this particular program have been well above our expectations.
 - (2) The Bachelor of Music in Music Education has been designed specifically with an orientation in the Canadian educational system.

- (3) The Master of Arts in Musicology offers areas of specialized study not available at Toronto. This University feels that a blend of the academic aspects of Musicology along with the opportunity for continuing practical performance is to the advantage of the student.

Philosophy - The Chairmen of the Ontario Philosophy Departments have been meeting twice a year since May 1968. A committee has been established to suggest a specific format for a summer institute in Philosophy.

Spanish - At graduate level the Department arbitrarily decided to stress Spanish Golden Age. At four meetings of Ontario Chairmen of Spanish Departments, the matter was discussed, but no agreements were reached.

BIOSCIENCES DIVISION

Bacteriology - Meetings of Chairmen or their representatives of Departments of Microbiology in Ontario were held during 1968 and 1969 to discuss the unique components of our various graduate courses, possible co-ordination or sharing of effort, visiting lecturers and aids to teaching. Further consultations are expected and it is to be hoped that formal proposals will arise from them outlining a practical program open to graduate students of other Universities.

Biochemistry - The method of correlation of effort in provincial departments of Biochemistry has been through meetings of Chairmen of the various Biochemistry Departments associated with the Health Sciences. Graduate activities have been discussed by this Committee. While there is some overlap of fields (e.g. protein chemistry between Western and Toronto) there is clear evidence that there is not duplication of effort and the approaches and methodology used are not the same in the two schools. Certain areas of biochemistry have by common consent been relegated to a particular school (e.g. non-clinical steroid biochemistry at Queen's). It is perhaps remarkable that the diversity of activity proceeding does not lead to greater overlap of activity.

Biology - Western is a founding member of the Huntsman Marine Laboratory at St. Andrews, New Brunswick.

We have collaborated through the Committee of Heads of Departments of Biological Science of Ontario Universities to prepare a report entitled "Inter-University Cooperation in the Biological Sciences" and submitted to OCGS Advisory Committee on Academic Planning. Attempts are being made to co-ordinate arrangements between other University Biology Departments so that costs for seminar programs and visiting speakers can be shared. The graduate programs are centred on several areas of strength. Occasional cooperation in seminars and lectures occurs.

- Medicine - A proposal to co-ordinate postgraduate training in Neurology and Neurosurgery in Southwestern Ontario is being developed by the Department of Clinical Neurological Sciences in co-operation with the Faculty of Medicine of McMaster University.
- The University of Western Ontario and Queen's University are co-operating in a program to assist in providing health services at Moose Factory and surrounding area. This program will involve several clinical departments and their residency postgraduate training programs as well as clinical clerks on an elective basis and members of the clinical faculty.
- Pharmacology - Heads of Departments of Pharmacology from four of the Medical Schools of Ontario have met to discuss mutual problems and exchange ideas. Training of graduate students was reviewed and a rotating co-operative course in advanced pharmacology was proposed.
- Physical and Health Education - Efforts to co-ordinate program offerings of this Department with other Provincially-assisted Universities have been formalized through a Council of Directors of Schools and Department of Physical Education in the Universities of Ontario. For two years this body has given attention to the following items in an attempt at co-ordination:
- (1) numbers of graduate students enrolled and graduating, projected to 1975
 - (2) positions available in secondary schools of Ontario (8 of 10 Universities have now established quotas as a result of the above data)
 - (3) areas of specialized research interests in M.A. programs
 - (4) visiting lecturers
 - (5) admission standards for graduate students.
- Physiology - The Chairmen of Physiology Departments of Ontario Universities have met on four occasions since June 1966 to exchange views and information on a variety of academic and administrative matters. Areas of emphasis by the various departments were considered. It was agreed that one of the main areas in Physiology at Western would be Neurophysiological and Endocrine Controls and Behaviour.

PHYSICAL SCIENCES DIVISION

- Applied Mathematics - Tentative beginnings have been made in three areas:
- (1) Exchange of course credits and members of supervising committees.
 - (2) Exchange of members of Faculty.

- (3) The Committee of Chairmen has received a proposal for summer "subject-oriented" research institutes which would include graduate courses and would be a co-operative effort of the Ontario Universities although hosted by specific institutions.
- Astronomy - Informal consultation with Astronomy faculty at Toronto, Queen's, Waterloo and York, has been a frequent practice. This has resulted in graduate students going to the University with the greatest strength in the area of interest to the student, e.g. radio-astronomy at Queen's, stellar spectroscopy at Western. Other areas of co-operation:
- (1) Arrangements are being made for one Faculty exchange.
 - (2) The June Institute at Toronto is regularly attended by graduate students from Western.
 - (3) Students and faculty from Western expect to make use of the University of Toronto's 24-inch telescope in Chile when it is completed.
- Chemistry - Agreement on and implementation of a common policy regarding academic requirements for admission to M.Sc. and Ph.D. programs.
- Computer Science - Since the establishment of the Committee of Chairmen, one of the main concerns has been the transfer of course credits. The Committee has also studied Admission Requirements.
- The Committee also established a Summer Institute at McMaster in May, 1970. The Department at Western contributed to the planning of this Institute, which offered courses in Information Retrieval, Formal Languages and Systems Programming.
- Engineering Science - During the 1969-70 session a Faculty exchange was negotiated with the University of Waterloo.
- The Boundary Layer Wind Tunnel has been utilized by Faculty members from other universities, including the University of Waterloo and the University of Guelph.
- In the Spring of 1961, a "quadrapartite" proposal for co-operation in the area of water resources was prepared by Guelph, Waterloo, McMaster and Western, and forwarded to the National Advisory Committee on Water Resources Research of the Federal Department of Energy, Mines and Resources.
- Geology - At the graduate level, compilation of graduate applications revealed that only a few students apply to several Ontario Universities. The definition of specialization for each Department has been prepared, but such definitions do not seem to have had much influence on developments at other Universities.

Geophysics -

Since this is the only Department of Geophysics in the Province the problem of integrating with other Universities is less than with the more traditional disciplines. At the University of Toronto, in the Physics Department, there is a large group of geophysicists and a smaller group at Queen's University. We keep in close personal contact with members of the other groups in order to ensure that there is no unnecessary overlap. At the moment, we are tentatively investigating the possibility of a common field camp involving a common camp site.

Mathematics -

The Department plans to participate in the setting up of "subject-oriented" summer research institutes with associated graduate courses at various Ontario Universities.

SOCIAL SCIENCES DIVISION

Geography -

Attention has been directed by Ontario Departments of Geography to limit unnecessary duplication in graduate programs and research. Discussions have been held on establishing summer institutes and on permitting a graduate student to take courses at another University for credit toward a degree from his home institution.

History -

The Department of History has not entered into any formal program of co-ordination with other Ontario Universities although informal discussions have been held. The Committee of Chairmen has considered the possibility of the establishment of regional groups for History with common admission requirements and faculties.

Library and Information
Science -

The School of Library and Information Science is planning to offer courses and research work leading to a doctoral degree in several aspects of library and information science, possibly in co-operation with the Toronto and Ottawa Library Schools. The three schools have been holding informal talks in the hope of providing an imaginative and academically sound program for the much-needed higher degree in Canada by (1) providing access to resources throughout Ontario for doctoral candidates; (2) sharing human resources in their teaching programs; and (3) agreeing on areas of specialization for the present proposal and for the proposed program at Toronto which is at present being appraised.

Political Science -

The Department, in agreement with other Departments of Political Science, specializes at the Ph.D. and to a lesser extent at the M.A. level in certain areas. Thus, the programs offered in Political Science are not duplicated in other Universities in Ontario.

Sociology -

At the present time the Department and the Department of Sociology and Anthropology at McMaster University are attempting to work out reciprocal arrangements for specific graduate courses in Sociology at their respective Universities. The goal at this time is to find some arrangement by which graduate students in the two Departments concerned could take graduate courses at the other University in areas which are not offered at their home University.

AGENDA ITEM -

1. Review of Current Programs

(b) Detailed presentation of graduate enrolment data:

(i) Enrolment in 1969-70 and 1970-71 (estimated) of masters' and doctoral candidates - as per Form A.

Actual enrolment for 1969-70 with distribution by discipline area and citizenship of Masters' and Doctoral candidates is given in Table CUA-70-A. Comparable figures for 1970-71 will be available on October 20th when this University meets with the Committee on University Affairs.

9/10/70

GRADUATE EMPLOYMENT DATA
DISTRIBUTION OF GRADUATE STUDENTS (FULL-TIME AND PART-TIME) BY DISCIPLINE AREA AND CITIZENSHIP

Form GUA-70-A

	Canadian	London	Immigrant	United States				Foreign				Other	Subtotal	TOTAL
				69-70	70-71	69-70	70-71	69-70	70-71	69-70	70-71			

	69-70	70-71	69-70	70-71	69-70	70-71	69-70	70-71	69-70	70-71	69-70	70-71	69-70	70-71
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AGGREGATE FIGURES

Full-time:	695	184	9	23	12	54	9	12	119	998
- Master's	231	138	6	4	4	43	6	3	66	435
- Doctoral	926	322	15	27	16	97	15	15	185	1433
- Total										
Part-time:	91	28	1	1	-	-	-	1	3	122
- Master's	90	15	1	-	-	-	-	-	1	106
- Doctoral	181	43	2	1	-	-	-	1	4	228
- Total										

BREAKDOWN BY DISCIPLINE AREA

HUMANITIES (Lang. & Lit)

Full-time:	49	19	1	8	-	1	-	-	10	78
- Master's	21	8	-	-	-	2	-	-	2	31
- Doctoral	70	27	1	8	-	3	-	-	12	109
- Total										
Part-time:	16	11	-	-	-	-	-	-	-	27
- Master's	21	3	-	-	-	-	-	-	-	24
- Doctoral	37	14	-	-	-	-	-	-	-	51
- Total										

HUMANITIES (History, etc.)

Full-time:	23	11	3	2	-	1	-	1	7	41
- Master's	20	14	1	-	-	-	-	-	1	35
- Doctoral	43	25	4	2	-	1	-	1	8	76
- Total										
Part-time:	20	-	-	-	-	-	-	-	-	20
- Master's	17	3	-	-	-	-	-	-	-	20
- Doctoral	37	3	-	-	-	-	-	-	-	40
- Total										

SOCIAL SCIENCES (General)

Full-time:	57	14	2	1	-	8	1	-	12	83
- Master's	44	21	-	-	-	3	-	-	3	68
- Doctoral	101	35	2	1	-	11	1	-	15	151
- Total										

[illegible]

	Canadian 1969-70 70-71	Landed Immigrant 69-70 70-71	Foreign					Subtotal	Total
			United States 69-70 70-71	United Kingdom 69-70 70-71	Europe 69-70 70-71	Asia 69-70 70-71	Africa 69-70 70-71	Other 69-70 70-71	

LIFE SCIENCES

Full-time: - Master's
- Doctoral
- Total

Part-time: - Master's
- Doctoral
- Total

HEALTH SCIENCES

Full-time: - Master's
- Doctoral
- Total

Part-time: - Master's
- Doctoral
- Total

EDUCATION

Full-time: - Master's
- Doctoral
- Total

Part-time: - Master's
- Doctoral
- Total

BUSINESS

Full-time: - Master's
- Doctoral
- Total

Part-time: - Master's
- Doctoral
- Total

28	10	1	-	-	2	-	-	3	41
26	22	-	1	2	10	-	-	13	61
54	32	1	1	2	12	-	-	16	102
4	-	-	-	-	-	-	-	-	4
5	1	-	-	-	-	-	-	-	6
9	1	-	-	-	-	-	-	-	10
30	9	-	-	-	3	1	-	4	43
27	10	-	-	-	3	1	-	4	41
57	19	-	-	-	6	1	-	8	84
3	3	1	-	-	-	-	-	-	6
1	1	1	-	-	-	-	-	1	3
4	4	1	-	-	-	-	-	1	9
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
322	18	-	6	8	2	1	5	22	362
14	2	-	-	-	1	-	-	1	17
336	20	-	6	8	3	1	5	23	379
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-

	Canadian		Landed Immigrant		United States		United Kingdom		Europe		Asia		Africa		Other		Subtotal		Total P.	
	1969-70	70-71	1969-70	70-71	1969-70	70-71	1969-70	70-71	1969-70	70-71	1969-70	70-71	1969-70	70-71	1969-70	70-71	1969-70	70-71	1969-70	70-71

OTHER

Full-time: - Master's
- Doctoral
- Total

Part-time: - Master's
- Doctoral
- Total

1. Do not include "qualifying year" students (as this term is defined in the Report on the Counting of Graduate Students).
2. Enrolment basis: Student numbers enrolled: "as at" December 1st of each year.
3. Enrolment reported for 1970-71 to be latest estimates available of 1970-71 actuals.
An updated report incorporating December 1st actuals is required by no later than January 1st, 1971.
4. Discipline areas are as defined in "Survey of Citizenship of Graduate Students Enrolled in Master's and Doctoral Degree Programmes at Ontario Universities in 1969-70 ----" (C.P.U.O. Research Division, May 11, 1970).

Finance Branch
6/12/70

AGENDA ITEM -

1. Review of Current Programs

(b) Detailed presentation of graduate enrolment data:

(ii) Sources of intake of new graduate students in 1969-70 and 1970-71 (estimated) - as per Form B.

Sources of intake of new graduate students in 1969-70 with distribution by discipline area and citizenship of Masters' and Doctoral candidates is given in Table CUA-70-B. Comparable figures for 1970-71 will be available on October 20th.

GRADUATE ENROLMENT DATA
DISTRIBUTION OF NEW REGISTERED GRADUATE STUDENTS (FULL-TIME AND PART-TIME) BY DISCIPLINE AREA AND CITIZENSHIP

	Canadian	Landed Immigrant	Foreign				Subtotal	TOTAL
			United States	United Kingdom	Europe	Asia Africa Other		
1969-70		1969-70	69-70	69-70	69-70	69-70	69-70	69-70

AGGREGATE FIGURES

Full-time:	- Master's	354	60	8	20	9	23	5	8	73	487
	- Doctoral	98	85	2	4	3	29	5	3	46	229
	- Total	452	145	10	24	12	52	10	11	119	716
Part-time:	- Master's	12	6	0	1	0	0	1	0	2	20
	- Doctoral	2	1	1	0	1	0	0	0	2	5
	- Total	14	7	1	1	1	0	1	0	4	25

BREAKDOWN BY DISCIPLINE AREAHUMANITIES (Language & Literature)

Full-time:	- Master's	21	10	1	7	0	1	0	0	9	40
	- Doctoral	15	9	0	0	0	2	0	0	2	26
	- Total	36	19	1	7	0	3	0	0	11	66
Part-time:	- Master's	4	2	0	1	0	0	0	0	1	7
	- Doctoral	1	0	0	0	0	0	0	0	0	1
	- Total	5	2	0	1	0	0	0	0	1	8

HUMANITIES (History, etc.)

Full-time:	- Master's	22	4	3	1	0	0	1	1	6	32
	- Doctoral	9	12	0	0	0	0	0	0	0	21
	- Total	31	16	3	1	0	0	1	1	6	53

	Canadian	Landed Immigrant	Foreign					Subtotal		TOTAL
			United States	United Kingdom	Europe	Asia	Africa	Other	Foreign	
	1969-70	1969-70	69-70	69-70	69-70	69-70	69-70	69-70	69-70	69-70
<u>HUMANITIES (History, etc.) (Continued)</u>										
Part-time:										
- Master's	0	0	0	0	0	0	0	0	0	0
- Doctoral	0	0	0	0	0	0	0	0	0	0
- Total	0	0	0	0	0	0	0	0	0	0
<u>SOCIAL SCIENCES (General)</u>										
Full-time:										
- Master's	36	6	1	1	0	1	4	0	7	49
- Doctoral	14	14	0	0	0	2	0	0	2	30
- Total	50	20	1	1	0	3	4	0	9	79
Part-time:										
- Master's	1	1	0	0	0	0	0	0	0	2
- Doctoral	0	0	0	0	0	0	0	0	0	0
- Total	1	1	0	0	0	0	0	0	0	2
<u>SOCIAL SCIENCES (Regional, etc.)</u>										
Full-time:										
- Master's	10	3	0	1	0	0	0	0	1	14
- Doctoral	7	6	0	0	0	0	0	0	0	13
- Total	17	9	0	1	0	0	0	0	1	27
Part-time:										
- Master's	0	0	0	0	0	0	0	0	0	0
- Doctoral	0	0	0	0	0	0	0	0	0	0
- Total	0	0	0	0	0	0	0	0	0	0
<u>PHYSICAL SCIENCES</u>										
Full-time:										
- Master's	13	4	0	2	0	7	0	1	10	27
- Doctoral	21	11	2	2	0	10	3	1	18	50
- Total	34	15	2	4	0	17	3	2	28	77

	Canadian	Landed Immigrant	Foreign					Subtotal	TOTAL
			United States	United Kingdom	Europe	Asia	Africa	Other	
	1969-70	1969-70	69-70	69-70	69-70	69-70	69-70	69-70	69-70
Part-time:									
- Master's	4	0	0	0	0	0	0	0	4
- Doctoral	0	0	0	0	0	0	0	0	0
- Total	4	0	0	0	0	0	0	0	4
Full-time:									
- Master's	5	4	0	0	1	1	0	0	11
- Doctoral	7	6	0	0	0	4	0	0	17
- Total	12	10	0	0	1	5	0	0	28
Part-time:									
- Master's	0	0	0	0	0	0	0	0	0
- Doctoral	1	0	1	0	1	0	0	0	3
- Total	1	0	1	0	1	0	0	0	3
Full-time:									
- Master's	14	7	0	1	2	3	0	0	27
- Doctoral	5	3	0	1	3	3	2	0	17
- Total	19	10	0	2	5	6	2	0	44
Part-time:									
- Master's	2	1	0	0	0	0	1	0	4
- Doctoral	0	1	0	0	0	0	0	0	1
- Total	2	2	0	0	0	0	1	0	5
Full-time:									
- Master's	10	3	1	0	0	2	0	0	16
- Doctoral	7	14	0	1	0	6	0	0	28
- Total	17	17	1	1	0	8	0	0	44

PHYSICAL SCIENCES (Continued)

Part-time: - Master's
- Doctoral
- Total

MATHEMATICAL SCIENCES

Full-time: - Master's
- Doctoral
- Total

Part-time: - Master's
- Doctoral
- Total

ENGINEERING

Full-time: - Master's
- Doctoral
- Total

Part-time: - Master's
- Doctoral
- Total

LIFE SCIENCES

Full-time: - Master's
- Doctoral
- Total

Canadian	Landed Immigrant	Foreign					Subtotal	TOTAL
		United States	United Kingdom	Europe	Asia	Africa	Foreign	
1969-70	1969-70	69-70	69-70	69-70	69-70	69-70	69-70	69-70

Part-time: - Master's
- Doctoral
- Total

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

HEALTH SCIENCES

Full-time: - Master's
- Doctoral
- Total

8	2	0	0	0	1	0	0	11
8	10	0	0	0	2	0	1	21
16	12	0	0	0	3	0	4	32

Part-time: - Master's
- Doctoral
- Total

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

EDUCATION

Full-time: - Master's
- Doctoral
- Total

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

Part-time: - Master's
- Doctoral
- Total

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0

BUSINESS

Full-time: - Master's
- Doctoral
- Total

5	0	0	0	0	0	0	1	6
---	---	---	---	---	---	---	---	---

Canadian Landed Immigrant

	1969-70	1969-70	Foreign					Subtotal Foreign	TOTAL
			United States	United Kingdom	Europe	Asia	Africa	Other	
	1969-70	1969-70	69-70	69-70	69-70	69-70	69-70	69-70	69-70

BUSINESS (Continued)

Part-time:
 - Master's
 - Doctoral
 - Total

0	0	0	0	0	0	0	0	0	0
---	---	---	---	---	---	---	---	---	---

OTHER

Full-time:

- Master's
 - Doctoral
 - Total

58	11	1	6	0	7	0	3	17	86
0	0	0	0	0	0	0	0	0	0
58	11	1	6	0	7	0	3	17	86

Part-time:

- Master's
 - Doctoral
 - Total

1	2	0	0	0	0	0	0	0	3
0	0	0	0	0	0	0	0	0	0
1	2	0	0	0	0	0	0	0	3

1. Do not include "qualifying year" students (as this term is defined in the Report on the Counting of Graduate Students).

2. Enrolment basis: Student numbers enrolled "as at" December 1st of each year.

3. Enrolment reported for 1970-71 to be latest estimates available of 1970-71 actuals.
 An updated report incorporating December 1st actuals is required by no later than January 1st, 1971.

4. Discipline areas are as defined in "Survey of Citizenship of Graduate Students Enrolled in Master's and Doctoral Degree Programmes at Ontario Universities in 1969-70 ----"(C.P.U.O. Research Division, May 11, 1970).

5. "New registered" graduate students are those enrolled in their program for the first time for the Fall Term.

Finance Branch
 6/10/70

AGENDA ITEM -

1. Review of Current Programs

(b) *Detailed presentation of graduate enrolment data:*

- (iii) *Degrees awarded, by level, (masters' and doctorate) in each academic year from 1964-65 to 1969-70 (actual) and 1970-71 to 1975-76 (estimated and projected) - as per Form C.*
- This should be supplemented with a comment by the University as to whether the pattern of masters' degrees (thesis vs non-thesis) has changed over the years.

The Graduate Degrees awarded by this University from 1964-65, with projections to 1975-76 are shown in Table CUA-70-C.

The following information concerning the shift in pattern of Masters' programs is of interest.

Arts Division:

There is a change to the course M.A. in the Arts Division (e.g. English, German). In both of the cases mentioned, the shift was made approximately a year ago and the enrolment is about 75% in favour of the course M.A. In Classics a thesis program was introduced into what had been essentially a course program three years ago. Here again, the enrolment is heavily in favour of the course M.A.

Biosciences Division:

No Department in this Division offers a Masters' program that does not require a thesis.

Physical Sciences Division:

In the Mathematical sciences the non-thesis Masters' program continues to predominate. About one-third of the students registered for an M.Sc. in Physics are in a program not requiring a thesis.

In Engineering Science the Master of Engineering program comprises only course work, while the Master of Engineering Science requires a thesis.

The actual numbers of registrants in the non-thesis programs of this Division are as follows:

<u>Department</u>	<u>Total Masters'</u> <u>Registrations: 1969-70</u>	<u>Number of</u> <u>Non-Thesis Masters'</u>
Applied Mathematics	5	5
Computer Science	14	13
Engineering	47	14
Mathematics	10	10
Physics	18	7

Social Sciences Division:

In Social Sciences, History is the only Department that has a non-thesis M.A. The enrolment is, however, heavily in favour of the thesis M.A.

A non-thesis Masters' program only is offered in Business Administration, School of Library and Information Science, Nursing, and Economics.

GRADUATE ENROLLMENT DATA
GRADUATE DEGREES AWARDED/TO BE AWARDED BY
DISCIPLINE AREA

Form CUA-70-C

	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
	Actual	Actual	Actual	Actual	Actual	Actual	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated

AGGREGATE FIGURES

Master's	235	245	289	281	388	493	598	674	736	816	961	1023
Doctoral	22	32	30	43	51	67	109	133	151	172	189	216

BREAKDOWN BY DISCIPLINE AREA

HUMANITIES (Language & Literature)

Master's	27	13	15	12	23	64	60	74	79	85	89	97
Doctoral	0	0	1	0	2	2	9	15	20	24	25	30

HUMANITIES (History, etc.)

Master's	14	21	18	12	11	32	33	39	45	49	53	57
Doctoral	0	0	0	0	3	2	11	14	16	17	20	21

SOCIAL SCIENCES (General)

Master's	34	37	46	47	51	38	57	70	74	79	85	92
Doctoral	1	2	6	8	6	9	14	17	21	27	31	36

SOCIAL SCIENCES (Regional, etc.)

Master's	4	7	13	7	8	9	10	10	11	12	13	14
Doctoral	0	0	0	0	0	1	3	3	3	3	4	5

PHYSICAL SCIENCES

Master's	10	11	17	12	19	22	27	28	29	32	34	35
Doctoral	10	14	13	16	20	27	28	29	31	33	36	37

MATHEMATICAL SCIENCES

Master's	11	9	22	15	8	30	21	25	29	30	33	34
Doctoral	1	2	2	1	4	3	6	8	9	10	11	13

	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
	Actual	Actual	Actual	Actual	Actual	Actual	Estimated	Estimated	Estimated	Estimated	Estimated	Estimated
<u>ENGINEERING</u>												
Master's	2	13	8	14	31	35	39	41	42	43	44	44
Doctoral	0	0	0	0	1	1	7	8	10	12	13	15
<u>LIFE SCIENCES</u>												
Master's	7	9	8	14	14	10	17	19	22	22	27	27
Doctoral	7	12	6	12	8	11	16	19	21	24	23	26
<u>HEALTH SCIENCES</u>												
Master's	3	5	11	5	13	14	17	20	22	26	29	31
Doctoral	2	2	2	5	6	7	8	12	12	11	14	18
<u>EDUCATION</u>												
Master's	0	0	0	0	0	0	0	0	13	64	173	203
Doctoral	0	0	0	0	0	0	0	0	0	0	0	0
<u>BUSINESS</u>												
Master's	118	115	125	134	154	166	178	197	214	216	218	222
Doctoral	1	0	0	1	1	4	7	8	10	11	12	13
<u>OTHER</u>												
Master's	5	5	6	9	56	73	139	151	156	158	163	167
Doctoral	0	0	0	0	0	0	0	0	0	0	0	2

Notes: (1) Discipline areas are as defined in "Survey of Citizenship of Graduate Students Enrolled in Master's and Doctoral Degree Programmes at Ontario Universities in 1969-70 ----" (C.P.U.O. Research Division, May 11, 1970).

AGENDA ITEM -

1. Review of Current Programs

(b) Detailed presentation of graduate enrolment data:

(iv) Projections of enrolment year by year for the next five years - as per Form D.

- This table should be supplemented with an explanation by the University as to how such projections can be reconciled with those for the entire Province.

Graduate enrolment projections to the year 1975-76 are shown in Table CUA-70-D. Further information concerning graduate enrolment is given in Item 3. (a)(i). Table VII shows the past actual (from 1967-68) and projected (to 1975-76) graduate enrolment for masters' and Ph.D. candidates according to the recognized Disciplines of the Faculty of Graduate Studies. The Table also gives figures for the Pre-requisite Qualifying Year. Table V consolidates graduate and undergraduate enrolment projections.

1/10/70

GRADUATE ENROLMENT DATA
PROJECTED GRADUATE ENROLMENT (FULL-TIME AND PART-TIME) BY DISCIPLINE AREA

Form CUA-70-D

	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
AGGREGATE FIGURES						
Full-time:						
- Master's	1118	1230	1294	1376	1431	1512
- Doctoral	477	545	588	629	671	709
- Total	1595	1775	1882	2005	2102	2221
Part-time:						
- Master's	207	220	233	248	262	279
- Doctoral	122	134	149	158	169	183
- Total	329	354	382	403	431	462
BREAKDOWN BY DISCIPLINE AREA						
HUMANITIES (Language & Literature)						
Full-time:						
- Master's	87	95	107	111	115	117
- Doctoral	46	55	56	60	62	64
- Total	133	150	163	171	177	181
Part-time:						
- Master's	36	43	45	48	50	54
- Doctoral	33	35	35	36	38	41
- Total	69	78	80	84	88	95
HUMANITIES (History, etc.)						
Full-time:						
- Master's	54	66	74	88	90	94
- Doctoral	35	38	39	43	46	48
- Total	89	104	113	131	136	142
Part-time:						
- Master's	31	46	51	57	61	66
- Doctoral	22	25	30	32	35	39
- Total	53	71	81	89	96	105
SOCIAL SCIENCES (General)						
Full-time:						
- Master's	100	112	119	123	126	130
- Doctoral	69	83	90	95	101	106
- Total	169	195	209	218	227	236

		1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
<u>SOCIAL SCIENCES (General) (continued)</u>							
Part-time:	- Master's	13	18	16	17	18	20
	- Doctoral	16	25	24	25	26	28
	- Total	29	43	40	42	44	48
<u>SOCIAL SCIENCES (Regional, etc.)</u>							
Full-time:	- Master's	34	38	38	39	40	40
	- Doctoral	20	25	26	26	28	29
	- Total	54	63	64	65	68	69
Part-time:	- Master's	19	19	20	21	22	23
	- Doctoral	11	11	10	11	12	13
	- Total	30	30	30	32	34	36
<u>PHYSICAL SCIENCES</u>							
Full-time:	- Master's	69	70	74	79	82	87
	- Doctoral	120	122	128	135	144	149
	- Total	189	192	202	214	226	236
Part-time:	- Master's	11	10	10	10	10	10
	- Doctoral	17	13	15	15	15	15
	- Total	28	23	25	25	25	25
<u>MATHEMATICAL SCIENCES</u>							
Full-time:	- Master's	31	43	48	53	56	57
	- Doctoral	28	35	40	43	48	54
	- Total	59	78	88	96	104	111
Part-time:	- Master's	4	4	6	6	6	6
	- Doctoral	7	6	6	6	6	6
	- Total	11	10	12	12	12	12
<u>ENGINEERING</u>							
Full-time:	- Master's	60	65	68	69	71	72
	- Doctoral	33	38	42	46	49	51
	- Total	93	103	110	115	120	123

		1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
<u>ENGINEERING (continued)</u>							
Part-time:	- Master's	18	17	16	16	16	16
	- Doctoral	6	8	9	9	9	9
	- Total	24	25	25	25	25	25
<u>LIFE SCIENCES</u>							
Full-time:	- Master's	54	55	54	58	60	62
	- Doctoral	58	69	74	77	81	85
	- Total	112	124	128	135	141	147
Part-time:	- Master's	3	--	5	5	5	5
	- Doctoral	5	1	5	5	5	5
	- Total	8	1	10	10	10	10
<u>HEALTH SCIENCES</u>							
Full-time:	- Master's	49	49	52	59	62	69
	- Doctoral	42	43	49	52	57	62
	- Total	91	92	101	111	119	131
Part-time:	- Master's	6	4	4	4	4	4
	- Doctoral	2	2	3	3	3	3
	- Total	8	6	7	7	7	7
<u>EDUCATION</u>							
Full-time:	- Master's	--	34	43	69	87	136
	- Doctoral	--	--	--	--	--	--
	- Total	--	34	43	69	87	136
Part-time:	- Master's	--	114	186	244	295	370
	- Doctoral	--	--	--	--	--	--
	- Total	--	114	186	244	295	370
<u>BUSINESS</u>							
Full-time:	- Master's	393	420	428	436	445	448
	- Doctoral	26	31	32	34	35	37
	- Total	419	451	460	470	480	485

		1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
<u>BUSINESS (continued)</u>							
Part-time:	- Master's	--	--	--	--	--	--
	- Doctoral	3	8	12	16	20	24
	- Total	3	8	12	16	20	24
<u>OTHER</u>							
Full-time:	- Master's	187	183	189	192	197	200
	- Doctoral	--	6	12	18	20	24
	- Total	187	189	201	210	217	224
Part-time:	- Master's	66	59	60	64	70	75
	- Doctoral	--	--	--	--	--	--
	- Total	66	59	60	64	70	75

AGENDA ITEM -

1. Review of Current Programs

(b) Detailed presentation of graduate enrolment data:

(v) Sources of support for graduate students enrolled in
1969-70 - as per Form E.

Sources of income for graduate students are outlined in Table CUA-70-E. This Table complements the comprehensive report of the Sources of Income for Graduate Students prepared by a Committee of the Ontario Council on Graduate Studies.

GRADUATE ENROLMENT DATA
SURVEY OF ANNUAL FINANCIAL RESOURCES FOR THE
SUPPORT OF FULL-TIME GRADUATE STUDENTS, 1969-70 ACTUAL

Scholarships and Bursaries		Research Grants		Remuneration		P.O.S.A.P.	Not Supported Under Any Of Categories 1-7
P.O.G.	Other	Federal Agencies	Other	Teaching Assistantships	Other University		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<hr/>							
Full-Time:							
-Master's	282,625	297,680	0	522,108	0	234,048	283
-Doctoral	256,600	538,695	0	405,559	1,500	12,065	37
-Total	<u>539,225</u>	<u>836,375</u>	<u>0</u>	<u>927,667</u>	<u>1,500</u>	<u>246,113</u>	<u>320</u>

AGGREGATE FIGURESBREAKDOWN BY DISCIPLINE AREAHUMANITIES (Language & Literature)SUBTOTALS

Full-Time:	77,250	3,000	0	129,934	0	7,965	6
-Master's	31,500	36,100	0	51,620	0	0	4
-Doctoral	108,750	39,100	0	181,554	0	7,965	<u>10</u>

HUMANITIES (History, Philosophy & the Arts)SUBTOTALS

Full-Time:	26,250	5,300	0	36,290	0	5,660	6
-Master's	34,500	36,800	0	38,150	1,500	600	4
-Doctoral	60,750	42,100	0	74,440	1,500	6,260	<u>10</u>

Not Supported Under
Any of
Categories 1-7

P. O. S. A. P.

Remuneration

Research Grants

Scholarships and
Bursaries

Teaching Assistantships (5)
Other University (6)

Federal Agencies (3)
Other (4)

P.O.G. (1)
Other (2)

(8)

(7)

(4)

(2)

SOCIAL SCIENCES (General)

SUBTOTALS

Full-Time: -Master's
-Doctoral
-Total

72,000 18,722
76,000 79,742
148,000 98,464

104,494
63,869
168,363

0
0
0

5,245
4,865
10,110

3
7
10

SOCIAL SCIENCES (Regional, Geographic & Planning)

SUBTOTALS

Full-Time: -Master's
-Doctoral
-Total

30,000 9,212
12,000 33,141
42,000 42,353

27,800
9,000
36,800

0
0
0

2,535
0
2,535

2
1
3

PHYSICAL SCIENCES

SUBTOTALS

Full-Time: -Master's
-Doctoral
-Total

23,125 35,233
47,850 97,931
70,975 133,164

51,644
98,217
149,861

0
0
0

4,095
2,790
6,885

3
5
8

Scholarships and Bursaries	Research Grants		Remuneration		P.O.S.A.P.
P.O.G.	Federal Agencies	Other	Teaching Assistantships	Other University	
(1)	(3)	(4)	(5)	(6)	(7)
9,000	8,910	0	40,340	0	600
14,000	17,400	0	40,953	0	3,210
<u>23,000</u>	<u>26,310</u>	<u>0</u>	<u>81,293</u>	<u>0</u>	<u>3,810</u>
2,250	17,894	0	17,340	0	4,950
2,250	11,600	0	26,610	0	0
<u>4,500</u>	<u>29,494</u>	<u>0</u>	<u>43,950</u>	<u>0</u>	<u>4,950</u>
6,750	17,200	0	57,786	0	1,000
22,750	51,733	0	50,765	0	0
<u>29,500</u>	<u>68,933</u>	<u>0</u>	<u>108,551</u>	<u>0</u>	<u>1,000</u>

MATHEMATICAL SCIENCES

SUBTOTALS

Full-Time:

-Master's

-Doctoral

-Total

ENGINEERING

SUBTOTALS

Full-Time:
-Master's
-Doctoral
-Total

LIFE SCIENCES

SUBTOTALS

Full-Time:	-Master's
	-Doctoral
	-Total

Not Supported Under
Any Of
Categories 1-7

P.O.S.A.P.

Remuneration

Research Grants

Scholarships and
Bursaries

	Scholarships and Bursaries		Research Grants		Remuneration		P.O.S.A.P.	Not Supported Under Any Of Categories 1-7
	P.O.G. (1)	Other (2)	Federal Agencies (3)	Other (4)	Teaching Assistantships (5)	Other University (6)		

(8)

HEALTH SCIENCESSUBTOTALS

Full-Time: -Master's
-Doctoral
-Total

9,000 64,900
15,750 70,458
24,750 135,358

51,692 0
50,225 0
101,917 0

13,110
26,375
39,485

0
0
0

600
600
1,200

3
4
7

BUSINESSSUBTOTALS

Full-Time: -Master's
-Doctoral
-Total

0 74,099
0 103,790
0 177,889

0 0
0 0
0 0

9,920
0
9,920

0
0
0

128,138
0
128,138

194
4
198

- 35 -

OTHERSUBTOTALS

Full-Time: -Master's
-Doctoral
-Total

27,000 43,210
0 0
27,000 43,210

6,065 0
0 0
6,065 0

33,450
0
33,450

0
0
0

73,260
0
73,260

58
0
58

GRADUATE ENROLMENT DATA
SURVEY OF ANNUAL FINANCIAL RESOURCES FOR THE
SUPPORT OF FULL-TIME GRADUATE STUDENTS, 1968/70 ACTUAL

NUMBER OF STUDENTS BY LEVEL OF SUPPORT					TOTAL		
NONE	\$1-500	\$501-1,000	\$1,001-2,000	\$2,001-3,000	\$3,001-4,000	\$4,001-5,000	\$5,001

Full-Time: -Master's
 -Doctoral
 -Total

$$\begin{array}{r} 998 \\ 435 \\ \hline 1,433 \end{array}$$

HUMANITIES (Language & Literature)

Full-Time: -Master's
 -Doctoral
 -Total

$$\begin{array}{r} 35 \overline{) 109} \\ 105 \\ \hline 40 \end{array}$$

SUBTOTALS

Full-Time:
-Master's
-Doctoral
-Total

$$\begin{array}{r} 0 \ 5 \overline{) 5} \\ 41 \end{array}$$

		NUMBER OF STUDENTS BY LEVEL OF SUPPORT								
		NONE	\$1-500	\$501-1,000	\$1,001-2,000	\$2,001-3,000	\$3,001-4,000	\$4,001-5,000	\$5,001	TOTAL
<u>SOCIAL SCIENCES (General)</u>										
<u>SUBTOTALS</u>										
Full-Time:	-Master's	3	1	1	11	52	10	5	0	83
	-Doctoral	7	0	0	1	8	14	34	4	68
	-Total	10	1	1	12	60	24	39	4	151
<u>SOCIAL SCIENCES (Regional, Geographic & Planning)</u>										
<u>SUBTOTALS</u>										
Full-Time:	-Master's	2	0	3	11	14	1	1	0	32
	-Doctoral	1	0	0	3	3	4	3	0	14
	-Total	3	0	3	14	17	5	4	0	46
<u>PHYSICAL SCIENCES</u>										
<u>SUBTOTALS</u>										
Full-Time:	-Master's	3	1	9	16	17	18	6	0	70
	-Doctoral	5	0	2	16	17	42	28	0	110
	-Total	8	1	11	32	34	60	34	0	180
<u>MATHEMATICAL SCIENCES</u>										
<u>SUBTOTALS</u>										
Full-Time:	-Master's	5	1	3	0	13	4	2	1	29
	-Doctoral	0	0	2	2	7	9	6	2	28
	-Total	5	1	5	2	20	13	8	3	57

NUMBER OF STUDENTS BY LEVEL OF SUPPORT									
	NONE	\$1-500	\$501-1,000	\$1,001-2,000	\$2,001-3,000	\$3,001-4,000	\$4,001-5,000	\$5,001	TOTAL
<u>ENGINEERING</u>									
<u>SUBTOTALS</u>									
Full-Time:	3	0	9	13	7	9	5	1	47
-Doctoral	4	0	0	2	9	6	6	3	30
-Total	7	0	9	15	16	15	11	4	77
<u>LIFE SCIENCES</u>									
<u>SUBTOTALS</u>									
Full-Time:	0	1	0	0	13	21	3	3	41
-Doctoral	4	0	0	1	8	33	13	2	61
-Total	4	1	0	1	21	54	16	5	102
<u>HEALTH SCIENCES</u>									
<u>SUBTOTALS</u>									
Full-Time:	3	1	2	2	8	19	4	4	43
-Doctoral	4	0	0	0	8	20	1	8	41
-Total	7	1	2	2	16	39	5	12	84
<u>BUSINESS</u>									
<u>SUBTOTALS</u>									
Full-Time:	194	39	69	46	7	6	0	1	362
-Doctoral	4	0	0	0	2	2	2	7	17
-Total	198	39	69	46	9	8	2	8	379

NUMBER OF STUDENTS BY LEVEL OF SUPPORT						
NONE	\$1-500	\$501-1,000	\$1,001-2,000	\$2,001-3,000	\$3,001-4,000	\$4,001-5,000
						\$5,001
						TOTAL

OTHER

SUBTOTALS

Full-Time: -Master's
 -Doctoral
 -Total

58	10	35	31	27	9	2
0	0	0	0	0	0	0
58	10	35	31	27	9	2

172	0
0	0
172	0

AGENDA ITEM -

1. Review of Current Programs

(c) *General and Honours programs in Arts and Science.*

(i) *Outline the University's attitude regarding continuing differentiation between general and honours programs.*

To obtain a consensus of the University for response to this question, the Departments of the three major Faculties involved - Arts, Science, and Social Science, were invited to submit statements. In addition, the Dean of Althouse College of Education, the Academic Commissioner, the University Students' Council, and the Society of Graduate Students, were requested to express their views. These submissions were then reviewed and debated in the Academic Policy Committee of the Senate.

With but one exception, every Department in the three major Faculties expressed an active interest in maintaining an Honours Program. Nevertheless, diversity of view was clearly evident with respect to the manner in which the objective might best be achieved. To understand the basis of this opinion, it is instructive to review the background of the Honours Programs. Traditionally, the Honours Program has played a significant and important role in the Universities of Ontario. It has been described as "the key to excellence in scholarship" through its provision of the opportunity for "in-depth study of a single discipline or two", and, as the prime "breeding ground" for potential graduate students, university teachers, high school teachers (with specialist qualifications) and professional careers. The general superiority of the Honours Program in these terms has been widely recognized in the past, and a large segment of the Faculty sees little evidence for any change in the validity of this recognition. In this context, the student is provided genuine alternatives in University work: the Honours Program, in which the characteristic features are concentration and depth, structured in large measure by those experienced in the discipline; and the General Program, characterized by its lack of structure, possible wide distribution in courses, and freedom for the student to develop a program suited to his own interests.

There is, however, a significant number of disciplines in which the view is held that similar objectives might be achieved effectively, with greater flexibility, through the adoption of a 3 + 1 sequence, i.e., three years of more widely distributed study but accompanied by the development of a group of core courses, followed by a fourth year of concentration and intensive study in a single discipline.

Much criticism has been levelled at the Honours Program, particularly by students in the General Program. Typical examples would include: General students are "second class citizens"; a minority of students (Honours) receive "elitist" attention giving rise to an "inequitable distribution of University resources"; the General student is "subjected to second-rate courses" taught by junior faculty and graduate students, while the Honours student is "segregated" into separate courses taught by senior faculty; the number of students in Honours Programs has not kept pace with the general increase in student numbers, this lack of "popularity" being attributed to rigidity in structure and the uncertainty of the students' future plans.

It is appropriate at this point to comment on some of these criticisms. At Western the relative proportions of students in the four main groups of programs has remained virtually unchanged since 1964 (see Table II) and in fact, beyond the first "common year of study" there is not a great disparity in the relative "popularities". Many of the more valid criticisms directed at the Honours Programs are related more or less directly to the existence of separate Honours and General courses. Over the past four years much improvement in the situation has been achieved and more is anticipated. Several disciplines have moved toward the virtual elimination of General courses, while most of the others are basing admission to Honours courses on the possession of stated prerequisites and a satisfactory level of prior achievement in the discipline. Finally, a definite policy has developed that permits the removal of inessential features of "rigidity" by reducing the number of required courses in the area of concentration (but not the total number), and by making subsidiary courses freely elective.

Further comment on Program developments in this University is included in Item 3. (c) and further comment on student preference is included in Item 3. (e) (iv).

In summation then, it is apparent that, for the period under projection, Western will maintain a significant differentiation between General and Honours Programs in the Faculties of Arts, Science, and Social Science, but the degree of differentiation at the level of individual courses open to the students in the two programs will be markedly diminished,

TABLE II

DISTRIBUTION OF FULL-TIME, UNDERGRADUATE CONSTITUENT UNIVERSITY ENROLMENTS

-Excluding Preliminary Year, Make-Up Year, Affiliated Colleges, "unclassified"-

	1964-65 %	1965-66 %	1966-67 %	1967-68 %	1968-69 %	1969-70 %	1970-71 %
FIRST YEAR PROGRAMS	35.0	34.9	36.9	33.4	36.2	36.4	34.1
GENERAL PROGRAMS Arts, Science, Social Science and Music YEAR 2	17.7	17.5	15.8	17.3	16.1	16.6	18.5
YEAR 3	12.4	13.5	14.0	14.8	14.4	12.4	12.9
Subtotal	30.1	31.0	29.8	32.1	30.5	29.0	31.4
HONORS PROGRAMS Arts, Science, Social Science and Music YEAR 2	7.3	7.5	9.7	9.7	8.7	9.8	9.5
YEAR 3	5.2	5.0	4.6	5.5	5.1	4.8	5.4
YEAR 4	4.5	4.1	3.4	3.8	4.3	4.0	3.7
Subtotal	17.0	16.6	17.7	19.0	18.1	18.6	18.6
PROFESSIONAL PROGRAMS ALL YEARS (except Year I Engineering Science and Nursing)	17.9	17.5	15.6	15.5	15.2	16.0	15.9
TOTALS	100	100	100	100	100	100	100

AGENDA ITEM -

1. Review of Current Programs

(c) *General and Honours Programs in Arts and Science.*

(ii) *University comment on the effects of the adoption of a single weight for Arts and Science students for operating grant purposes.*

A single weight for Arts and Science students could simplify administrative procedures somewhat for the Department of University Affairs. There would be less simplification for the University, since each University must maintain complete course and program records for its own use in planning future development.

There are considerable differences in costs to the University of offering courses in Arts and Science, as is recognized by the existing weighting system. The question of whether or not these weights reflect precisely the actual cost differences cannot be answered without an extensive cost-analysis study. The question as to what the precise differences in costs should be involves a series of judgements concerning many academic and economic factors. The answer to such a complex question cannot be found within one university or one university system, and certainly cannot be expected for some time, if indeed a valid answer exists at all.

The financial implications for this University of a common weight as compared to the present system of weights can be determined for the present mix of Arts and Science students. The computation shows that a common weight of 1.18 would be appropriate for Western if the mix were to remain as it was in 1969-70.

If there were to be an increase in the proportion of higher-weight students of 2% per year, then the appropriate common weight would have to increase to 1.27 over the next five years. There are two conditions at Western that make such an increase in the proportion of higher-weight students probable: the expansion of the Health Sciences and the limitation of First Year enrolment. The expanding Health Science Complex is attracting an increasing number of Science-oriented students. Many of these eventually enter Science programs

other than Medicine or Dentistry. The limitation of First Year enrolment will raise the average level of academic attainment of students accepted for admission. If the present correlation between academic performance and program preference of our applicants continues, the resultant mix of Arts and Science students will continue to change in favour of higher-weight students.

For these reasons then, and despite the indications of a probable weight of 1.2 which would be to the financial advantage of Western over the short term, the adoption of a single weight for Arts and Science students is not looked upon with favour at this time.

AGENDA ITEM -

1. Review of Current Programs

(d) *Health Sciences Programs (where applicable)*

- (i) *Enrolment (undergraduate and graduate) in each health science program, year by year, for 1969-70 (actual), 1970-71 (estimated) and 1971-72 to 1975-76 (forecast) - as per Form F.*

Table CUA-70-F has been completed for the following:

Medicine

Medical Rehabilitation - Communication Disorders
(Speech Pathology and Audiology)

Medical Rehabilitation - Occupational Therapy

Medical Rehabilitation - Physical Therapy

Medical Internes

Medical Residents

Dentistry

Dental Hygiene

Nursing

HEALTH SCIENCES PROGRAMS
LONG-TERM ENROLMENT DATA
TO 1975-76

Form CUA-70-F

Health Sciences Program Reported MEDICINE

Instructions:

1. Programs of study in the Health Sciences, are listed below:

	<u>Undergraduate</u>	<u>Graduate</u>
Dentistry	*	*
Hygiene and Public Health	*	*
Medicine	*	*
Physio and Occupational Therapy	*	*
Dental Hygiene	*	
Dip. Public Health Nursing	*	
Medical Interns	*	
Medical Residents	*	
Nursing	*	*
Pharmacy	*	*
Hospital Administration		*
Optometry	*	

2. Please complete this report in a manner consistent with the enrolment categorization scheme and definitions reflected on the regular D.U.A. Enrolment Reports (Forms UA3). Note particularly, however, the precise requirement under item (i) which is for registration in the 1st University year subsequent to Grade 13 into undergraduate degree programs only.

<u>1970-71</u> (Estimate)		<u>1971-72</u>	<u>1972-73</u>	<u>1973-74</u>	<u>1974-75</u>	<u>1975-76</u>
	(i) Full-Time "Freshman Intake" (i.e. 1st Year Undergraduate Degree)					
<u>85</u>		<u>85</u>	<u>85</u>	<u>100</u>	<u>100</u>	<u>100</u>
	(ii) Total Full-Time Undergraduate (including diploma and other non-degree and make-up or qualifying year) •					
<u>325</u>		<u>335</u>	<u>340</u>	<u>355</u>	<u>370</u>	<u>385</u>
	(iii) Total Graduate (Fall-Term)					
<u>-</u>		* <u>-</u>	<u>1</u>	<u>2</u>	<u>4</u>	<u>6</u>
	(iv) Total Full-Time Enrolment (ii plus iii)					
<u>325</u>		<u>335</u>	<u>341</u>	<u>357</u>	<u>374</u>	<u>391</u>
	(v) F.T.E. of Part-Time Enrolment using Formula Conversion Factors (including "Summer School" Graduate Students)					
<u>-</u>				N. A.		
	(vi) F.T.E. Enrolment (iv plus v)					
<u>325</u>		<u>335</u>	<u>341</u>	<u>357</u>	<u>374</u>	<u>391</u>
	(vii) Total Basic Income Units Under Formula (i.e. Total Weighted Enrolment) Undergraduate Wt. = 5.0 M. Clin. Sc. Wt. = 4.0					
<u>1625</u>		<u>1675</u>	<u>1704</u>	<u>1783</u>	<u>1866</u>	<u>1949</u>

Explanatory Comments outlining variations in above enrolment data as compared with similar forecasts submitted Fall, 1969 (Please deal with both the quantitative parameters of these variations and the reasons for them):

* Includes only M. Clinical Sc. programme - all other M.Sc. and Ph.D. students enrolled in Basic Health Science Departments are included in submission from Faculty of Graduate Studies.

HEALTH SCIENCES PROGRAMS
LONG-TERM ENROLMENT DATA
TO 1975-76

Form CUA-70-F

Health Sciences Program Reported Medical Rehabilitation - Communication Disorders
(Speech Pathology and Audiology)

Instructions:

1. Programs of study in the Health Sciences, are listed below:

	<u>Undergraduate</u>	<u>Graduate</u>
Dentistry	*	*
Hygiene and Public Health	*	*
Medicine	*	*
Physio and Occupational Therapy	*	*
Dental Hygiene	*	
Dip. Public Health Nursing	*	
Medical Interns	*	
Medical Residents	*	
Nursing	*	*
Pharmacy	*	*
Hospital Administration		*
Optometry	*	

2. Please complete this report in a manner consistent with the enrolment categorization scheme and definitions reflected on the regular D.U.A. Enrolment Reports (Forms UA3). Note particularly, however, the precise requirement under item (i) which is for registration in the 1st University year subsequent to Grade 13 into undergraduate degree programs only.

<u>1970-71</u> (Estimate)		<u>1971-72</u>	<u>1972-73</u>	<u>1973-74</u>	<u>1974-75</u>	<u>1975-76</u>
<u>6</u>	(i) Full-Time "Freshman Intake" (i.e. 1st Year Undergraduate Degree) *	<u>10</u>	<u>12</u>	<u>12</u>	<u>12</u>	<u>12</u>
<u>6</u>	(ii) Total Full-Time Undergraduate (including diploma and other non-degree and make-up or qualifying year) •	<u>16</u>	<u>28</u>	<u>34</u>	<u>36</u>	<u>36</u>
<u>-</u>	(iii) Total Graduate (Fall-Term)			<u>N.A.</u>		
<u>6</u>	(iv) Total Full-Time Enrolment (ii plus iii)	<u>16</u>	<u>28</u>	<u>34</u>	<u>*36</u>	<u>36</u>
	(v) F.T.E. of Part-Time Enrolment using Formula Conversion Factors (including "Summer School" Graduate Students)			<u>N.A.</u>		
<u>6</u>	(vi) F.T.E. Enrolment (iv plus v)	<u>16</u>	<u>28</u>	<u>34</u>	<u>36</u>	<u>36</u>
<u>9</u>	(vii) Total Basic Income Units Under Formula (i.e. Total Weighted Enrolment) Wt. = 1.5	<u>24</u>	<u>42</u>	<u>51</u>	<u>54</u>	<u>54</u>

Explanatory Comments outlining variations in above enrolment data as compared with similar forecasts submitted Fall, 1969 (Please deal with both the quantitative parameters of these variations and the reasons for them):

* This is the second year of the four year undergraduate programme. First year is in General Science.

HEALTH SCIENCES PROGRAMS
LONG-TERM ENROLMENT DATA
TO 1975-76

Form CUA-70-F

Health Sciences Program Reported Medical Rehabilitation - Occupational Therapy

Instructions:

1. Programs of study in the Health Sciences, are listed below:

	<u>Undergraduate</u>	<u>Graduate</u>
Dentistry	*	*
Hygiene and Public Health	*	*
Medicine	*	*
Physio and Occupational Therapy	*	*
Dental Hygiene	*	
Dip. Public Health Nursing	*	
Medical Interns	*	
Medical Residents	*	
Nursing	*	*
Pharmacy	*	*
Hospital Administration		*
Optometry	*	

2. Please complete this report in a manner consistent with the enrolment categorization scheme and definitions reflected on the regular D.U.A. Enrolment Reports (Forms UA3). Note particularly, however, the precise requirement under item (i) which is for registration in the 1st University year subsequent to Grade 13 into undergraduate degree programs only.

<u>1970-71</u> (Estimate)	<u>1971-72</u>	<u>1972-73</u>	<u>1973-74</u>	<u>1974-75</u>	<u>1975-76</u>
(i) Full-Time "Freshman Intake" (i.e. 1st Year Undergraduate Degree) *	10	15	20	20	20
(ii) Total Full-Time Undergraduate (including diploma and other non-degree and make-up or qualifying year) *	10	25	45	55	60
(iii) Total Graduate (Fall-Term)			N. A.		
(iv) Total Full-Time Enrolment (ii plus iii)	10	25	45	55	60
(v) F.T.E. of Part-Time Enrolment using Formula Conversion Factors (including "Summer School" Graduate Students)			N. A.		
(vi) F.T.E. Enrolment (iv plus v)	10	25	45	55	60
(vii) Total Basic Income Units Under Formula (i.e. Total Weighted Enrolment) Wt. = 1.5	15	37.5	67.5	82.5	90

Explanatory Comments outlining variations in above enrolment data as compared with similar forecasts submitted Fall, 1969 (Please deal with both the quantitative parameters of these variations and the reasons for them):

* This is the second year of the four year undergraduate programme. First Year is in General Science.

HEALTH SCIENCES PROGRAMS
LONG-TERM ENROLMENT DATA
TO 1975-76

Form CUA-70-F

Health Sciences Program Reported Medical Rehabilitation - Physical Therapy

Instructions:

1. Programs of study in the Health Sciences, are listed below:

	<u>Undergraduate</u>	<u>Graduate</u>
Dentistry	*	*
Hygiene and Public Health	*	*
Medicine	*	*
Physio and Occupational Therapy	*	*
Dental Hygiene	*	
Dip. Public Health Nursing	*	
Medical Interns	*	
Medical Residents	*	
Nursing	*	*
Pharmacy	*	*
Hospital Administration		*
Optometry	*	

2. Please complete this report in a manner consistent with the enrolment categorization scheme and definitions reflected on the regular D.U.A. Enrolment Reports (Forms UA3). Note particularly, however, the precise requirement under item (i) which is for registration in the 1st University year subsequent to Grade 13 into undergraduate degree programs only.

<u>1970-71</u> (Estimate)		<u>1971-72</u>	<u>1972-73</u>	<u>1973-74</u>	<u>1974-75</u>	<u>1975-76</u>
<u>20</u>	(i) Full-Time "Freshman Intake" (i.e. 1st Year Undergraduate Degree) *	<u>20</u>	<u>20</u>	<u>20</u>	<u>20</u>	<u>20</u>
<u>57</u>	(ii) Total Full-Time Undergraduate (including diploma and other non-degree and make-up or qualifying year) •	<u>60</u>	<u>60</u>	<u>60</u>	<u>60</u>	<u>60</u>
<u>-</u>	(iii) Total Graduate (Fall-Term)	<u> </u>	<u> </u>	<u>N.A.</u>	<u> </u>	<u> </u>
<u>57</u>	(iv) Total Full-Time Enrolment (ii plus iii)	<u>60</u>	<u>60</u>	<u>60</u>	<u>60</u>	<u>60</u>
<u>-</u>	(v) F.T.E. of Part-Time Enrolment using Formula Conversion Factors (including "Summer School" Graduate Students)	<u> </u>	<u> </u>	<u>N.A.</u>	<u> </u>	<u> </u>
<u>57</u>	(vi) F.T.E. Enrolment (iv plus v)	<u>60</u>	<u>60</u>	<u>60</u>	<u>60</u>	<u>60</u>
<u>85.5</u>	(vii) Total Basic Income Units Under Formula (i.e. Total Weighted Enrolment) Wt. = 1.5	<u>90</u>	<u>90</u>	<u>90</u>	<u>90</u>	<u>90</u>

Explanatory Comments outlining variations in above enrolment data as compared with similar forecasts submitted Fall, 1969 (Please deal with both the quantitative parameters of these variations and the reasons for them):

* This is the second year of the four year undergraduate programme. First year is in General Science.

HEALTH SCIENCES PROGRAMS
LONG-TERM ENROLMENT DATA
TO 1975-76

Form CUA-70-F

Health Sciences Program Reported Medical Internes

Instructions:

1. Programs of study in the Health Sciences, are listed below:

	<u>Undergraduate</u>	<u>Graduate</u>
Dentistry	*	*
Hygiene and Public Health	*	*
Medicine	*	*
Physio and Occupational Therapy	*	*
Dental Hygiene	*	
Dip. Public Health Nursing	*	
Medical Interns	*	
Medical Residents	*	
Nursing	*	*
Pharmacy	*	*
Hospital Administration		*
Optometry	*	

2. Please complete this report in a manner consistent with the enrolment categorization scheme and definitions reflected on the regular D.U.A. Enrolment Reports (Forms UA3). Note particularly, however, the precise requirement under item (i) which is for registration in the 1st University year subsequent to Grade 13 into undergraduate degree programs only.

<u>1970-71</u> (Estimate)		<u>1971-72</u>	<u>1972-73</u>	<u>1973-74</u>	<u>1974-75</u>	<u>1975-76</u>
<u>60</u>	(i) Full-Time "Freshman Intake" (i.e. 1st Year Undergraduate Degree)	<u>60</u>	<u>72</u>	<u>82</u>	<u>82</u>	<u>82</u>
<u>60</u>	(ii) Total Full-Time Undergraduate (including diploma and other non-degree and make-up or qualifying year) •	<u>60</u>	<u>72</u>	<u>82</u>	<u>82</u>	<u>82</u>
<u>-</u>	(iii) Total Graduate (Fall-Term)			<u>N. A.</u>		
<u>60</u>	(iv) Total Full-Time Enrolment (ii plus iii)	<u>60</u>	<u>72</u>	<u>82</u>	<u>82</u>	<u>82</u>
<u>-</u>	(v) F.T.E. of Part-Time Enrolment using Formula Conversion Factors (including "Summer School" Graduate Students)			<u>N. A.</u>		
<u>60</u>	(vi) F.T.E. Enrolment (iv plus v)	<u>60</u>	<u>72</u>	<u>82</u>	<u>82</u>	<u>82</u>
<u>150</u>	(vii) Total Basic Income Units Under Formula (i.e. Total Weighted Enrolment) Wt. = 2.5	<u>150</u>	<u>180</u>	<u>205</u>	<u>205</u>	<u>205</u>

Explanatory Comments outlining variations in above enrolment data as compared with similar forecasts submitted Fall, 1969 (Please deal with both the quantitative parameters of these variations and the reasons for them):

Present enrolment of Internes (Junior rotating, mixed and straight) are those based at St. Joseph's and Victoria Hospitals.

With the opening of the new University Hospital scheduled for the summer of 1972, it is estimated that 12 internes would be engaged in 1972-73 and the full complement of 22 internes would be reached in 1973-74.

HEALTH SCIENCES PROGRAMS
LONG-TERM ENROLMENT DATA
TO 1975-76

Form CUA-70-F

Health Sciences Program Reported Medical Residents *

Instructions:

1. Programs of study in the Health Sciences, are listed below:

	<u>Undergraduate</u>	<u>Graduate</u>
Dentistry	*	*
Hygiene and Public Health	*	*
Medicine	*	*
Physio and Occupational Therapy	*	*
Dental Hygiene	*	
Dip. Public Health Nursing	*	
Medical Interns	*	
Medical Residents	*	
Nursing	*	*
Pharmacy	*	*
Hospital Administration		*
Optometry	*	

2. Please complete this report in a manner consistent with the enrolment categorization scheme and definitions reflected on the regular D.U.A. Enrolment Reports (Forms UA3). Note particularly, however, the precise requirement under item (i) which is for registration in the 1st University year subsequent to Grade 13 into undergraduate degree programs only.

<u>1970-71</u> (Estimate)	<u>1971-72</u>	<u>1972-73</u>	<u>1973-74</u>	<u>1974-75</u>	<u>1975-76</u>	
(i) Full-Time "Freshman Intake" (i.e. 1st Year Undergraduate Degree)			N. A.			
(ii) Total Full-Time Undergraduate (including diploma and other non-degree and make-up or qualifying year) •	158	168	180	210	240	258
(iii) Total Graduate (Fall-Term)			N. A.			
(iv) Total Full-Time Enrolment (ii plus iii)	158	168	180	210	240	258
(v) F.T.E. of Part-Time Enrolment using Formula Conversion Factors (including "Summer School" Graduate Students)			N. A.			
(vi) F.T.E. Enrolment (iv plus v)	158	168	180	210	240	258
(vii) Total Basic Income Units Under Formula (i.e. Total Weighted Enrolment) Wt. = 2.5	395	420	450	525	600	645

Explanatory Comments outlining variations in above enrolment data as compared with similar forecasts submitted Fall, 1969 (Please deal with both the quantitative parameters of these variations and the reasons for them):

* Includes Assistant Residents and Residents but not Teaching or Research Fellows.

The increased envisaged in 1972 and 1973 is related to the staffing of the new University Hospital scheduled to open in September, 1972.

If the enrolment of additional postgraduate students in Family Medicine becomes possible by the provision of requested Family Medical Training Centres, the enrolments will be revised upwards in period 1972-76.

HEALTH SCIENCES PROGRAMS
LONG-TERM ENROLMENT DATA
TO 1975-76

Form CUA-70-F

Health Sciences Program Reported DENTISTRY

Instructions:

1. Programs of study in the Health Sciences, are listed below:

	<u>Undergraduate</u>	<u>Graduate</u>
Dentistry	*	*
Hygiene and Public Health	*	*
Medicine	*	*
Physio and Occupational Therapy	*	*
Dental Hygiene	*	
Dip. Public Health Nursing	*	
Medical Interns	*	
Medical Residents	*	
Nursing	*	*
Pharmacy	*	*
Hospital Administration		*
Optometry	*	

2. Please complete this report in a manner consistent with the enrolment categorization scheme and definitions reflected on the regular D.U.A. Enrolment Reports (Forms UA3). Note particularly, however, the precise requirement under item (i) which is for registration in the 1st University year subsequent to Grade 13 into undergraduate degree programs only.

<u>69-70</u>	<u>1970-71</u>		<u>1971-72</u>	<u>1972-73</u>	<u>1973-74</u>	<u>1974-75</u>	<u>1975-76</u>
<u>Actual</u>	<u>(Estimate)</u>						
42	52	(i) Full-Time "Freshman Intake" (i.e. 1st Year Undergraduate Degree)	52	52	52	52	52
88	134	(ii) Total Full-Time Undergraduate (including diploma and other non-degree and make-up or qualifying year) •	177	198	208	208	208
-	-	(iii) Total Graduate (Fall-Term)	4	8	12	15	15
		(iv) Total Full-Time Enrolment (ii plus iii)	181	206	220	223	223
		(v) F.T.E. of Part-Time Enrolment using Formula Conversion Factors (including "Summer School" Graduate Students)			N. A.		
	134	(vi) F.T.E. Enrolment (iv plus v)	181	206	220	223	223
	670	(vii) Total Basic Income Units Under Formula (i.e. Total Weighted Enrolment)	901	1022	1088	1100	1100

Explanatory Comments outlining variations in above enrolment data as compared with similar forecasts submitted Fall, 1969 (Please deal with both the quantitative parameters of these variations and the reasons for them):

HEALTH SCIENCES PROGRAMS
LONG-TERM ENROLMENT DATA
TO 1975-76

Form CUA-70-F

Health Sciences Program Reported Dental Hygiene

Instructions:

1. Programs of study in the Health Sciences, are listed below:

	<u>Undergraduate</u>	<u>Graduate</u>
Dentistry	*	*
Hygiene and Public Health	*	*
Medicine	*	*
Physio and Occupational Therapy	*	*
Dental Hygiene	*	
Dip. Public Health Nursing	*	
Medical Interns	*	
Medical Residents	*	
Nursing	*	*
Pharmacy	*	*
Hospital Administration		*
Optometry	*	

Please complete this report in a manner consistent with the enrolment categorization scheme and definitions reflected on the regular D.U.A. Enrolment Reports (Forms UA3). Note particularly, however, the precise requirement under item (i) which is for registration in the 1st University year subsequent to Grade 13 into undergraduate degree programs only.

<u>1970-71</u> (Estimate)		<u>1971-72</u>	<u>1972-73</u>	<u>1973-74</u>	<u>1974-75</u>	<u>1975-76</u>
-	(i) Full-Time "Freshman Intake" (i.e. 1st Year Undergraduate Degree) *	-	20	20	20	20
-	(ii) Total Full-Time Undergraduate (including diploma and other non-degree and make-up or qualifying year) *	-	20	40	60	60
-	(iii) Total Graduate (Fall-Term)	-	-	N. A.	-	-
-	(iv) Total Full-Time Enrolment (ii plus iii)	-	20	40	60	60
-	(v) F.T.E. of Part-Time Enrolment using Formula Conversion Factors (including "Summer School" Graduate Students)	-	-	N. A.	-	-
-	(vi) F.T.E. Enrolment (iv plus v)	-	20	40	60	60
-	(vii) Total Basic Income Units Under Formula (i.e. Total Weighted Enrolment)	-	40	80	120	120

Explanatory Comments outlining variations in above enrolment data as compared with similar forecasts submitted Fall, 1969 (Please deal with both the quantitative parameters of these variations and the reasons for them):

* This is the second year of the four year undergraduate programme. First year is in General Science.

HEALTH SCIENCES PROGRAMS
LONG-TERM ENROLMENT DATA
TO 1975-76

Form CUA-70-F

Health Sciences Program Reported NURSINGInstructions:

1. Programs of study in the Health Sciences, are listed below:

	<u>Undergraduate</u>	<u>Graduate</u>
Dentistry	*	*
Hygiene and Public Health	*	*
Medicine	*	*
Physio and Occupational Therapy	*	*
Dental Hygiene	*	
Dip. Public Health Nursing	*	
Medical Interns	*	
Medical Residents	*	
Nursing	*	*
Pharmacy	*	*
Hospital Administration		*
Optometry	*	

2. Please complete this report in a manner consistent with the enrolment categorization scheme and definitions reflected on the regular D.U.A. Enrolment Reports (Forms UA3). Note particularly, however, the precise requirement under item (i) which is for registration in the 1st University year subsequent to Grade 13 into undergraduate degree programs only.

<u>1970-71</u> (Estimate)	<u>1971-72</u>	<u>1972-73</u>	<u>1973-74</u>	<u>1974-75</u>	<u>1975-76</u>
(i) Full-Time "Freshman Intake" (i.e. 1st Year Undergraduate Degree) Basic Nursing	60	70	75	75	75
45	25	30	40	45	50
25					
(ii) Total Full-Time Undergraduate (including diploma and other non-degree and make-up or qualifying year) •	247	285	334	382	415
200					
(iii) Total Graduate (Fall-Term)	10	14	18	20	25
8					
(iv) Total Full-Time Enrolment (ii plus iii)	257	299	352	402	440
208					
(v) F.T.E. of Part-Time Enrolment using Formula Conversion Factors (including "Summer School" Graduate Students)	3	3	3	3	3
2.9					
(vi) F.T.E. Enrolment (iv plus v)	260	302	355	405	443
210.9					
(vii) Total Basic Income Units Under Formula (i.e. Total Weighted Enrolment)	542	634	748	852	938
439.6					

Explanatory Comments outlining variations in above enrolment data as compared with similar forecasts submitted Fall, 1969 (Please deal with both the quantitative parameters of these variations and the reasons for them):

Item (ii) above now includes full-time qualifying students for graduate programme.

AGENDA ITEM -

1. Review of Current Programs

(d) *Health Science Programs (where applicable)*

(ii) *University comment on:*

- *the relationship of forecast enrolment to Provincial need for health sciences personnel.*
- *the possibility of expanding enrolment in each health sciences program with staff and facilities now on hand or included in current forecast.*

MEDICINE

Basic M.D.'s

With existing basic science and clinical facilities a class size of 85 is the maximum that can be accommodated. If the proposed expansion of Basic Health Science facilities is approved, it will be possible to increase the entering class size to 100. With the opening of the University Hospital in the summer of 1972, there will be sufficient clinical teaching unit beds in London to permit a class size of 100. Western will then have the second largest class size in Ontario, next to Toronto (225 - 250).

The output of M.D.'s from Ontario schools will still not meet the Provincial requirements for physicians. The Ontario Council of Health's Committee on Manpower has recommended the establishment of another new medical school in the Province. In addition, it is estimated that there will be at least 100 new immigrant physicians per year registered in Ontario.

To increase the class size beyond 100 would require further Basic Health Science facilities and probably an expanded utilization of community hospitals in neighbouring cities for clinical instruction.

Postgraduate M.D.'s

The Senior Co-ordinating Committee and the Ontario Council of Health have estimated that 50 - 60% of graduates should be trained to become primary or family physicians in the future.

The present three-year postgraduate training program in Family Medicine could accommodate more trainees if the proposed additional urban and rural centres were developed.

The number of trainees in the other clinical specialties will be increased when the University Hospital is available, but not to the same extent as in Family Medicine.

The Committee of the Ontario Council of Deans of Medicine which examined manpower production has concluded that "manpower production in the specialties of Anaesthesia, Clinical Bacteriology, Community Medicine, Otolaryngology, and Therapeutic Radiology is decidedly inadequate in 1970 and will remain so in 1975." An inadequate manpower production in many of the sub-specialties of Medicine, Paediatrics, Pathology, and Surgery is also noted.

Graduate Studies (M.Sc. and Ph.D.)

The Provincial committee foresees an overproduction of M.Sc.'s and Ph.D.'s in Physiology and Biochemistry by 1975. There is a serious underproduction of M.Sc.'s and Ph.D.'s, however, in Bacteriology, Biomedical Engineering, Epidemiology and Community Health, and Pathology. It is pointed out that graduate physicians who are being trained to take senior academic positions often take an M.Sc. or Ph.D. degree.

Medical Rehabilitation

The forecast enrolment in the three programs, Physical Therapy, Speech Pathology and Audiology, and Occupational Therapy, is primarily aimed at providing well trained therapists who may assist in teaching programs, direct hospital programs, etc. The output is far less than the Provincial need, but physical facilities do not permit an increased class size at the present time.

DENTISTRY

There can be little doubt that Ontario requires more dentists. The quantitative problem of providing dental care services is, however, seriously exacerbated by inequalities in distribution. Western's Faculty of Dentistry will be enrolling 52 students in its freshman class in September, 1970. This is the maximum class size upon which its physical facilities were specified.

Keeping in mind that Western, located in a city which has a population of approximately 208,000, is accepting 52 students in each of its four years, it is interesting to compare this projected intake with the rated undergraduate class size of four other Canadian dental schools:

Faculty of Dentistry	City in which Located	Population of Greater City	Rated Undergraduate Class Size
Dalhousie Univ.	Halifax	200,000	25
U. of Manitoba	Winnipeg	500,000	33
U. of Alberta	Edmonton	500,000	50
U. of Br. Columbia	Vancouver	750,000	40

Western's Faculty of Dentistry suggests that it is making every possible effort consistent with a reasonable degree of academic and clinical integrity, to develop its undergraduate, graduate and dental hygiene programs with all due dispatch, in full appreciation of the fact that it has a major responsibility in providing a maximum number of graduates of unquestioned competence to serve the dental health needs of the people of Ontario.

The vital factors for expansion of the undergraduate dental program are not staff and facilities. Given appropriate financial support for the acquisition of additional staff, and making adjustments to utilize the physical facilities more comprehensively, it would be possible to increase class size. If there is any criticism to which this Faculty could reasonably be subject, it might well arise from its decision to enroll classes of a size for which adequate numbers of patients exhibiting a broad spectrum of dental and oral conditions cannot be assured. It is our opinion that we should not, in the foreseeable future, accept more than 52 students per year.

NURSING

The Report of the Ontario Council of Health Committee on Health Manpower recommended that :

- "as an objective, approximately 20 per cent of Nursing Personnel should achieve advanced education in one of the following ways:
- (a) a basic or post-basic course leading to a university degree - B.Sc.N.
 - (b) a post-graduate course leading to a diploma or certificate, awarded by a Provincially recognized post-secondary educational institution." (Recommendation 35)

The Ontario Department of Health has estimated that by 1975-76, based upon present university projections, approximately 10% of nursing personnel will graduate from university programs with a B.Sc.N. Courses as defined in (b) above are almost non-existent at the present time. As presently projected, by 1976 15% of the recipients of the B.Sc.N. degree in Ontario will graduate from Western.

The need to expand university programs in Nursing appears to be accepted by the Ontario Department of Health. The Faculty of Nursing has indicated a willingness to participate in this expansion, but several problems must be solved before even the presently projected expansion can take place. As indicated elsewhere [Item 2. (c)(i)], qualified Faculty are very scarce. At the present time, it is difficult to provide satisfactory clinical experience for students. Nursing programs are expensive because of the large clinical component and the necessity to have a low student-faculty ratio. It is recommended that the formula financing in relation to nursing programs be reviewed. Physical facilities on and off campus are insufficient. With these and other less serious problems, it is not possible to expand further enrolment in nursing programs with staff and facilities now on hand or included in current forecasts.

AGENDA ITEM -

1. Review of Current Programs

(d) *Health Science Programs (where applicable)*

- (iii) *Total operating costs of each health sciences program, for 1969-70 (actual), 1970-71 (estimated) and 1971-72 to 1975-76 (forecast) and University comment as to sources of required funds to meet such costs - as per Form G.*

Table CUA-70-G giving total operating costs of each Health Sciences Program for 1969-70 (actual), 1970-71 (estimated) and forecasted to 1975-76 is not available at the present time. It is hoped that the Table will be completed by October 20th when this University meets with the Committee on University Affairs.

AGENDA ITEM -

1. Review of Current Programs

(d) *Health Science Programs (where applicable)*

- (iv) *Outline of capital costs of University projects in the Health Sciences developed during the past five years and/or contemplated for the next five years. Identify each project and indicate the scale and unit cost (per n.a.s.f.), actual or estimated, for that project.*

Capital Costs - Health Sciences Projects [Developed during the past
Five Years]

WE 13 HS - Dental Sciences Building
as at 4/30/70 - complete \$8,383,813.50

Ontario Universities Capital Aid Corporation	\$4,090,000.00
Health Resources Fund - Ontario	4,090,000.00
U.W.O. Capital Funds	203,813.50
	<hr/>
	\$8,383,813.50
	<hr/>

Scale and Cost:

123,000 n.a.s.f. @ \$68.00

WE 31 HS - Research Equipment \$1,030,531.24
as at 6/30/70 - not complete*

Ontario Universities Aid Corporation	\$ 343,799.50
Health Resources Fund - Ontario	445,000.00
Ontario Department of Health	198,799.50
U.W.O. Capital Funds	42,932.24
	<hr/>
	\$1,030,531.24
	<hr/>

* Balance remaining: \$68,267.76.

Health Science Capital Projects [Contemplated for the Next Five Years]

A.	(1)	Addition to Health Sciences Library 1,225 ASF @ \$50.	\$ 61,250.
	(2)	Addition to Animal Quarters 10,973 ASF @ \$75.	822,970.
B.	(1)	(a) Faculty of Nursing 20,500 ASF @ \$55.	1,127,500.
		(b) Unallocated modular space 4,600 ASF @ \$55.	253,000.
		(c) Basic Health Science Departments 9,000 ASF @ \$70.	630,000.
		(d) Health Science Administration 4,000 ASF @ \$55.	220,000.
	(2)	Kresge Building Alterations	
		(a) Alterations and Furnishings	103,000.
		(b) Tunnel and Overpass	40,000.
	(3)	Medical Sciences Building Alterations (Biophysics, Medical History, and Medicine General)	15,000.
	(4)	Health Sciences Library Alterations 950 ASF @ \$8.	7,600.
	(5)	Research Equipment - Basic Science Departments	315,000.
			<hr/>
		TOTAL	<u><u>\$3,595,325.</u></u>

AGENDA ITEM -

1. Review of Current Programs

(d) *Health Science Programs (where applicable)*

(v) *Outline of uses of health sciences facilities for university programs other than health sciences programs.*

MEDICINE

Table III summarizes the undergraduate enrolment in University courses other than Health Sciences programs given by the Basic Health Science Departments in the Health Sciences Centre.

The response to Item 1. (b)(i) [Table CUA-70-A], which outlines existing and forecast enrolment in graduate programs in Basic Health Science Departments, also indicates the utilization of health science facilities for other than health science programs.

Table IV summarizes programs within the Faculty of Graduate Studies that are located within the Basic Health Sciences facilities.

DENTISTRY

The Dental Sciences Building, being physically attached to the Medical Sciences Building, provided for the physical expansion of six Basic Health Science Departments (Anatomy, Bacteriology and Immunology, Biochemistry, Pathology, Pharmacology, and Physiology) within the second, third and fourth floors of the Dental Sciences Building. To the extent that these Basic Health Science Departments mount Honours courses for students enrolled in the Faculty of Science, courses for students in Physical and Health Education, and for non-health science graduate students enrolled in the Faculty of Graduate Studies, the facilities of the Dental Sciences Building are utilized as well as those within the Medical Sciences Building.

Space within the lower, lower ground floor is now being used for emergency office space primarily for Faculties other than the Health Sciences. This area eventually is to be used for dining and common room facilities.

NURSING

The facilities of the Faculty of Nursing Building are at all times available to the rest of the University when not being used specifically for Health Science programs. These facilities are used by other Departments of the University only occasionally during the academic year but are used fairly extensively for Summer School courses.

TABLE III

Course Enrolment in 1969-70 in Courses Other Than
Health Sciences Given by Basic Health Science Departments

Department		Course No.		Enrolment
Anatomy		254 (Phys. Health Educ.)		83
		300 (Honours Science)		23
	*	464B " "		1
Bacteriology & Immunology		300 (Honours Science) [1]		24
	*	441 " "		5
		460 " "		4
	*	461A " "		4
	*	462B " "		7
		465 " " [2]		3
	*	467A " " [1]		4
	*	470A " "		9
	*	472B " "		4
		480 " "		3
Biochemistry		46 (General Science)		58
		300 (Honours Science)		20
		406 " "		42
	*	440 " "		9
		441 " "		7
	*	456 " "		7
	*	461 " "		13
	*	462A " "		4
	*	463B " "		12
	*	465 " " [3]		3
	*	468A " "		8
	*	469A " "		2
		480 " "		7
		460 " "		11
Biophysics		300 (Honours Science)		10
		440 " "		6
		441 " "		7
		460 " "		6
	*	461A " "		5
	*	462B " "		6
	*	463A " "		6
	*	464B " "		5
		480 " "		5

* Half Courses.

[1] Taught jointly with Botany

[2] Taught jointly with Biochemistry

[3] Taught jointly with Bacteriology

Pharmacology	301	(Honours Science)	[4]	28
	441	"	"	2
	460	"	" [4]	9
	461	"	"	5
	480	"	"	2
Physiology	30	(General Science)		18
	300	(Honours Science)		28
	301	"	" [5]	28
	342	(Phys. Health Educ.)		55
	* 440	(Honours Science)		9
	* 441	"	"	7
	442	(Phys. Health Educ.)		56
	460	(Honours Science)	[5]	9
	* 461	"	"	10
	* 462	"	"	10
	* 463	"	"	9
	* 464	"	"	7
	* 465	"	"	1
	480	"	"	13

* Half Courses

[4] Taught jointly with Physiology

[5] Taught jointly with Pharmacology

TABLE IV

Programs Within the Faculty of Graduate Studies Located in
Basic Health Science Facilities - 1970-71

<u>Department</u>	<u>No. of Students</u>	
	<u>M.Sc.</u>	<u>Ph.D.</u>
Anatomy	6	9
Bacteriology & Immunology	12	9
Biochemistry	11	15
Biophysics	8	10
Epidemiology	1	1
Pathology	4	3
Pharmacology	8	5
Physiology	11	11
	<hr/> 61	<hr/> 63

M.Sc. $61 \times 3 = 183$ B.S.U.

Ph.D. $63 \times 4 = \underline{252}$ B.S.U.

TOTAL 435 B.S.U.

AGENDA ITEM -

2. Factors Affecting Levels of University Support

(a) Detailed presentation of types and sizes of classes:

(i) Summary of data submitted for C.P.U.O. survey -
as per Form H.

Table CUA-70-H is derived from the data recorded in DUA Forms 70-H, the C.P.U.O. request for section-size information.

The source of the data was a survey conducted earlier in the year for internal purposes. While there are certain reservations regarding the quality of output from this survey, it was the best available if the deadlines of C.P.U.O. and CUA were to be met.

Despite these reservations, the effect of the averaging process was to smooth out most if not all variations. The data on average section size, therefore, should be quite adequate within the context of the format in which they appear. The "totals" columns, however, are misleading in certain cases and may be in others. This portion of the analysis should be treated with appropriate circumspection.

FORM CIA-70-11

SUMMARY OF CLASS SIZE SURVEY DATA FOR
1969 REPORTED TO THE COMMITTEE OF PRESIDENTS
FREQUENCY DISTRIBUTION OF CLASS SECTIONS

☒ YEARS 1-6 Undergraduate
☐ Year 7 Graduate

UNIVERSITY of Western Ontario

SECTION SIZE	0-3			4-10			11-20			21-40			41-60			81-160			161-300			301+			AVERAGE SECTION SIZE (4)	TOTAL STUDENT CONTACT HOURS PER WEEK	TOTAL P.T.E. ENROLLMENT FALL TERM (5)	TOTAL CONTACT HOURS/WEEK PER STUDENT		
	LE	LA	TU	LE	LA	TU	LE	LA	TU	LE	LA	TU	LE	LA	TU	LE	LA	TU	LE	LA	TU									
DIS- CIPLINE AREA																														
PURE HUMANITIES	7	-	2	42	5	9	137	71	205	134	31	6	54	-	-	6	-	-	-	-	-	-	27	18	13	YRS 1-6	14,567	1,231	YRS 1-6	11.83
APPLIED HUMANITIES	4	8	1	5	19	4	9	14	3	23	18	1	6	1	-	3	1	-	1	-	-	29	14	14		2,048.5	103.7		19.75	
PURE SOCIAL SCIENCES	3	-	5	5	3	47	20	12	17	31	36	17	86	14	-	19	1	-	14	-	-	75	27	19		23,460	2,059.2		11.39	
APPLIED SOCIAL SCIENCES	-	-	3	-	-	5	6	4	14	18	19	12	24	3	9	6	3	-	-	-	-	56	42	42		15,436.5	821		18.80	
PURE BIOLOGICAL SCIENCES	5	10	-	20	20	2	10	13	20	12	65	-	6	8	-	9	1	-	4	-	-	55	24	13		9,339	500.4		18.66	
APPLIED BIOLOGICAL SCIENCES	3	12	4	11	12	7	11	9	9	11	3	2	11	5	-	2	2	-	-	-	-	28	17	11		6,105.5	833		7.33	
PURE PHYSICAL SCIENCES	6	3	1	32	14	9	23	21	-	18	83	-	25	6	9	18	9	-	5	-	-	58	28	54		11,838.5	587.3		20.16	
APPLIED PHYSICAL SCIENCES	6	2	-	21	12	1	17	27	1	16	26	2	11	2	-	18	-	-	-	-	-	43	18	72		9,777.5	280.1		34.91	
TOTAL	34	36	16	136	85	84	233	171	423	260	281	204	223	24	24	81	16	13	45	23	20		92,572.5	6,415.7		14.43				

NOTES AND INSTRUCTIONS:

(1) Data will agree with and be based upon CPUCO survey requirements as set out in Memorandum dated 14th July, 1970:- 251

(2) This form is to be completed twice, once for years 1-6 undergraduate, and once for year 7-graduate. YEAR

(3) Le - Lecture; La - Laboratory; Tu - Tutorials and Seminars.

(4) Average Section Size = Total of Course Enrollments ÷ Total Number of Sections. GRAND TOTAL

172,236.5 10,002.0 17.22

NOTES AND INSTRUCTIONS:

- (1) Data will agree with and be based upon CPUO survey requirements as set out in Memorandum dated 14th July, 1970: - 257
- (2) This form is to be completed twice, once for years 1-6 undergraduate, and once for year 7-graduate.
- (3) Le - Lecture; La - Laboratory; Tu - Tutorials and Seminars.
- (4) Average Section Size = Total of Course Enrollments ÷ Total Number of Sections.
- (5) As per Forms UA3 Submitted December 1969, distributed according to D.B.S. Discipline Groupings used in the Survey.

GRAND TOTAL

The class size spectrum used here anticipates prematurely the spectrum which only the basic data itself will indicate as most appropriate. For this and other reasons this summary is very much secondary to the provision of the data itself to CPUO.

September 8, 1970.

FORM CUA-70-11
UNIVERSITY of Western Ontario

SUMMARY OF CLASS SIZE SURVEY DATA FOR
1969 REPORTED TO THE COMMITTEE OF PRESIDENTS
FREQUENCY DISTRIBUTION OF CLASS SECTIONS

SECTION TYPE	0-3			4-10			11-20			21-40			41-80			81-160			161-300			301+			TOTAL STUDENT CONTACT HOURS PER WEEK			TOTAL ENROLLMENT FALL TERM (5)			TOTAL CONTACT HOURS/WEK PER STUDENT		
	LE	LA	TU	LE	LA	TU	LE	LA	TU	LE	LA	TU	LE	LA	TU	LE	LA	TU	LE	LA	TU	LE	LA	TU	LE	LA	TU	LE	LA	TU	LE	LA	TU
PURE SCIENTIFICS	2	-	-	8	-	-	3	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
APPLIED SCIENTIFICS	4	4	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ARTS HUMANITIES	-	-	-	-	-	-	1	-	-	3	1	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PHILOSOPHY	-	-	3	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PHYSICAL SCIENTIFICS	16	4	15	12	7	5	4	10	2	1	3	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PHILOSOPHY	2	2	-	1	2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PHYSICAL SCIENTIFICS	23	2	33	33	1	1	6	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PHILOSOPHY	14	2	23	23	1	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PHYSICAL SCIENTIFICS	61	12	49	80	10	69	19	13	4	6	4	24	2	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	111	32	149	249	49	199	119	139	49	119	139	249	119	139	249	119	139	249	119	139	249	119	139	249	119	139	249	119	139	249	119	139	249

NOTES AND INSTRUCTIONS:

- (1) Data will agree with and be based upon CPUO survey requirements as set out in Memorandum dated 14th July, 1970.
- (2) This form is to be completed twice, once for years 1-6 undergraduate, and once for year 7-graduate.
- (3) Le - Lecture; La - Laboratory; Tu - Tutorials and Seminars.
- (4) Average Section Size = Total of Course Enrollments ÷ Total Number of Sections.
- (5) As per Forms UA3 Submitted December 1969, distributed according to D.B.S. Discipline Groupings used in the Survey.

IMPORTANT The class size spectrum used here anticipates prematurely the spectrum which only the basic data itself will indicate as most appropriate. For this and other reasons this summary is very much secondary to the provision of the data itself to CPUO.

September 8, 1970

AGENDA ITEM -

2. Factors Affecting Levels of University Support

(a) Detailed presentation of types and sizes of classes:

(ii) Outline of new approaches to teaching and learning being considered by the University and the possible effects of such on class size and operating costs.

The thoughtfully-prepared and well-presented lecture remains the cornerstone of the University approach to the teaching-learning process and, furthermore, in conjunction with the seminar and tutorial, forms the only proven method, although there would appear to be much intrinsic merit in some of the more innovative approaches currently under development.

The initial consequence of the rapid increase in the numbers of students enrolled in the University in the past decade was a considerable increase in the average lecture class size. The trends in class patterns now developing are two-fold: an increase in the number of sections of individual courses and a decrease in the total number of lectures (with a concomitant increase in the number of seminars/tutorials) in any given course.

There is of course an ever increasing recognition of the value and actual use of the many audio-visual instructional aids now available (e.g. television, film strip, film, slide and overhead projectors, tape-recorders, computers, programmed texts, etc.) The main role of these facilities is seen to be in the increased effectiveness of the presentation, regardless of the type of class involved. The use of television in this University is not highly developed. The early experiments (especially Applied Mathematics and Physics) of presenting "televised lectures" to very large classes have now largely been discontinued. Television is used more effectively in presenting, for example, laboratory material in Chemistry and Physics, and visual demonstrations in the Health Sciences (e.g. Anatomy, Physiology). The Departments of Botany and Zoology have developed an audio-tutorial presentation which is being used to good effect in the first year Biology laboratory. Some Departments are examining the development of programmed-learning techniques in their discipline.

"Team-teaching" involving the use of a number of Faculty members (4 - 7) working as a unit in class meetings is being employed currently by the Department of English and the School of Business Administration. The initial results are promising and other academic units are considering further development of the concept. The increasing interest in the development of "interdisciplinary" courses and programs may be viewed as a recognition of their value in the learning process.

One final aspect of current trends in the teaching/learning process concerns methods of evaluation. Education is, in one sense, evaluation. In this sense then it is relevant to comment upon the increasing degree of de-emphasis of final examinations and the increasing use of a variety of in course testing procedures, essays, projects, and the like, which provide a continuous stream of "feed-back".

The basic thrust of the developments just outlined is a move toward more "individualistic oriented" teaching and learning through smaller classes with increasing use of instructional aids. The consequences of these changes appear to be an increase in direct costs but, hopefully with a better end product. It is obvious, however, that there is very little objective evidence that innovative methods are truly superior, although there is certain objective evidence that they are more expensive (e.g. the introduction of television at Scarborough College and, on a more limited scale, this University.) What is needed, therefore, is considerably more research into these methods and an adequate assessment of their value through suitably controlled pilot-studies.

AGENDA ITEM -

2. Factors Affecting Levels of University Support

(a) Detailed presentation of types and sizes of classes:

- (iii) Comments on possible effects of educational technology on class patterns at the University.

It is not anticipated that educational technology, in its present state of development, will have any significant effects on class patterns in the period up to 1975. Ultimately, however, and possibly in the period 1976-1980, the impact of certain developments is likely to be profound. There are two particularly promising areas of development. The first of these will be the use of individual study carrels equipped with electronic visual recorders and other audio-visual facilities. The second will be the employment of the Computer in conjunction with "graphic-display" units and "special purpose computer terminals" with time-sharing capability.

The possibility of ever-increasing opportunity for individual study on a demand basis made possible by these and other techniques should permit important reductions in the number of regular meetings, such as formal lectures or tutorials; presumably the need for seminar or panel type discussions would continue.

AGENDA ITEM -

2. Factors Affecting Levels of University Support

(b) Resource Allocation - University Operating Funds.

(i) Budget allocations for major salary and non-salary categories for the years 1969-70 (actual) 1970-71 (estimated) and 1971-72 (projected) - as per Form I.

Table CUA-70-I gives the requested data concerning finances. The Table includes actual figures for 1969-70 and the approved figures for 1970-71. Projections for 1971-72 are not available at this time.

DRAFT - to be finalized after consultation
with University Financial Officers.

Form CUA-70-I

STATEMENT OF THE FINANCING OF OPERATIONS - Page 1

	1969-70 Actual (\$000's)	1970-71 Official Budget (\$000's)	1971-72 Projected (\$000's)
All gross expenditures of the University other than on Capital Account	50,215	58,595	
<u>LESS:</u> (a) Assisted/Sponsored Research	6,222	6,300	
(b) Principal and interest payments on capital indebtedness	-	-	
(c) Student aid	-	-	
(d) Ancillary enterprises (as per Form J)	5,881	6,784	
(e) Costs of programs in education, if any (Note 1)	2,854	3,108	
Total exclusions	14,957	16,192	
Remainder - representing operating expenditures eligible for formula and other operating grant support (analysed on page 2)	35,258	42,403	
			REQUIRED
			NOT
<u>Sources of Financial Support for Above:</u>			
(a) Basic operating income (weighted enrol- ment * x unit value) (20,546.7 x 1530)	31,436	39,198	
(b) Other operating grants	1,122	279	
(c) Balance	2,700	2,926	
Total (equal to Remainder above)	35,258	42,403	

Note 1: For 1969-70 and 1970-71 deduct amounts representing total allowable operating expenditures taken into account in arriving at grants for teacher education programs. For 1971-72 deduct amount representing 5% escalation in the budget on a per student basis.

* For 1970-71, official budget figure of weighted enrolment.

STATEMENT OF THE FINANCING OF OPERATIONS - Page 2

	1969-70 Actual		1970-71 Official Budget		1971-72 Projected	
1. Enrolment of the university weighted in accordance with the Operating Grants Formula (1)						
(i) Projected (official)			23,756			
(ii) Used in official budget of the university			23,756			
(iii) Latest estimate			23,668			
(iv) Actual	20,546.7					
		Total Amount (\$000's)	Per unit of weight- ed Enrol- ment	Total Amount (\$000's)	Per unit of weight- ed Enrol- ment (2)	Total Amount (\$000's)
2. Total operating expenditures, as per Page 1(5)	35,258	1,716.05	42,403	1,784.94		
Less: (i) All academic salaries(3)						
(full-time, part-time, graduate assistant- ships and other class- room instructional salaries)	14,154	688.89	18,441	776.27		
(ii) Fringe benefits related to above	1,510	73.49	1,800	75.77		
Balance, All other operating expenditures	19,594	953.66	22,162	932.90		
Breakdown of all other Operating expenditures:						
1. All furniture and equip- ment	1,942	94.52	1,304	54.89		
2. Library:						
-Library Acquisitions	1,337	65.07	1,059	44.58		
-Salaries and wages of library staff	1,430	69.59	1,846	77.71		
-Fringe benefits related to above	114	5.55	131	5.51		
3. Plant maintenance(4)						
-Salaries and wages	3,009	146.45	3,451	145.27		
-Fringe benefits related to above	271	13.19	310	13.05		
-Other	701	34.12	565	23.78		
4. Remainder:						
-Salaries and wages	5,583	271.73	6,837	287.80		
-Fringe benefits related to above	490	23.85	106	4.46		
-Other objects of expenditure	4,717	229.58	6,553	275.85		
TOTAL (as above)	19,594	953.66	22,162	932.90		

- NOTES: (1) This, of course, may be greater than the eligible number of basic income units.
(2) Basis of calculation: weighted enrolment used in official budget of the university.
(3) To include academic administration.
(4) To include all expenses (except furniture and equipment) included under definitions 18 and 22(a) of "Instructions, Definitions and Notes Relating to the Completion of the DBS-CAUBO Report on Financial Statistics of Universities and Colleges for 1969".
(5) By way of supplementary comment, please disclose the University's policies with respect to the use it may make of "reserves" or "appropriations". The effect of such policies, and their measurable dollar impact should also be disclosed, in sufficient detail to permit a full understanding of the University's procedures towards arriving at annual operating expenditures.

AGENDA ITEM -

2. Factors Affecting Levels of University Support

(b) *Resource Allocation - University Operating Funds.*

(ii) University comments on adequacy of patterns indicated in (i).

The University is attempting to function as efficiently as possible within the constraints of the limited operating resources made available.

As will be demonstrated in Item 3. (b), the University suffered from an acute shortage of space in 1969-70. This has necessitated the diversion of considerable amounts of operating funds to the provision of emergency space by the undertaking of costly alterations and by the acquisition of temporary portable buildings. With the current building program this condition of space shortage will persist until the 1972-73 academic year.

AGENDA ITEM -

2. Factors Affecting Levels of University Support

(b) *Resource Allocation - University Operating Funds.*

(iii) *Outline of sources of revenue and expenditures for ancillary operations for the years 1969-70 (actual) 1970-71 (estimated) and 1971-72 (forecast) - as per Form J.*

Table CUA-70-J gives the requested data for ancillary operations. Again actual figures are given for 1969-70 and the approved budget for 1970-71. Projections for 1971-72 are not available.

ANCILLARY OPERATIONS (1)

Form CUA 70-J

Total for All Ancillary Enterprises

1969-70 Actual

	BOOKSTORE	FOOD SERVICES	RESIDENCES	APARTMENTS	HEALTH SERVICES	ATHLETICS	PARKING
-	-	-	-	-	71,823	243,199	-
1,352,359	1,078,337	2,595,953	350,469	-	-	39,059	162,660
-	-	-	-	-	-	-	11,002
1,352,359	1,078,337	2,595,953	350,469	71,823	282,258	173,662	
1,294,954	1,038,063	2,517,297	347,669	117,287	264,687	165,488	
-	-	-	-	-	-	-	-
1,294,954	1,038,063	2,517,297	347,669	117,287	264,687	165,488	
57,405	40,274	78,656	2,800	(45,464)	17,571	8,174	
22,216	45,725	-	-	-	6,650	-	
35,189	(5,451)	78,656	2,800	(45,464)	10,921	8,174	
-	-	(58,047)	(2,800)	45,464	-	-	
35,189	(5,451)	20,609	-	-	10,921	8,174	

NAME OF ANCILLARY ENTERPRISE

SOURCES OF DIRECT REVENUE

1. Fee or membership revenue.
2. Direct charges for goods or services.
3. Other.

TOTAL DIRECT REVENUE

DIRECT COSTS

1. Costs directly attributable to the enterprise.
2. Costs shared with other ancillary enterprise(s).

TOTAL DIRECT COSTS

EXCESS (shortfall) of Direct Revenue over Direct Costs

INDIRECT (Overhead or Joint) Costs
 "as ordinarily budgeted but excluding transfers as dealt with below:

EXCESS (shortfall)

NET EFFECT OF TRANSFERS "To" and "from" "Appropriations" and "Reserves"

REPORTED OR BUDGETED EXCESS OR (SHORTFALL) ON ANCILLARY ENTERPRISE.

(1) Those enterprises that are not directly related to the educational functions of the university, but are undertaken or operated to provide services to faculty and students. For purposes of illustration, operations which may be recognized as ancillary enterprises are student residences, student unions, packing facilities, alumni services, cafeterias, dining halls, book stores, university presses, intercollegiate and intramural athletics, health services, (except portion provided as part of counselling or advisory services) etc.

(a) Provision for maintenance of Residences

(c) Provision for maintenance of Residences (\$6,300)

(b) Provision for maintenance of Residences (as per OSHC) (d) Transfer from Health Services Reserve Funds

\$41,980

6/10/70

AGENDA ITEM -

2. Factors Affecting Levels of University Support

(c) *Effects of the Academic Marketplace*

(i) *University comments on general conditions in finding qualified faculty members.*

A survey of Faculties and Departments showed that in general no great difficulty has been encountered in obtaining qualified Faculty at the junior level, but that experienced persons for senior appointments are not easily found. Even at the junior level difficulty has been encountered, notably in the Faculty of Nursing, the School of Library and Information Science, and the Departments of Italian and Russian, where considerable difficulty has been experienced in finding qualified Faculty at any level. Many Departments reported that whereas in general qualified junior Faculty were readily available, difficulty had been experienced in certain specialized areas. Among these specialized areas are Canadian Urban Government and Politics in Political Science; Urban and Regional in Economics; Gross Anatomy, Endocrinology, Physical Medicine and Rehabilitation in Medicine; Canadian Literature in English; Language, Linguistics, and Medieval and Renaissance Studies in French; Applied Statistics and Fluid Dynamics in Applied Mathematics; and Galactic Structure and Stellar Spectroscopy in Astronomy.

One point raised by several Departments was that although persons with adequate qualifications at the junior level could be obtained with no great difficulty, outstanding candidates were extremely difficult to find. Some Departments reported that the number of offers made was four times the number of persons finally engaged. Over the past few years throughout the University there have been a number of unfilled positions, an observation which suggests that, although qualified persons were available, the Departments were prepared to leave positions open rather than to engage people who did not meet with their standards. The important question would therefore seem to be not whether qualified people are available, qualified being interpreted to mean a person having the basic prerequisite for a university teacher, namely a Ph.D., but whether the University has been able to attract the calibre of person we would wish.

In the light of Item 2. (c)(ii) it would seem to be of interest to report on attempts to engage qualified Canadian-trained Faculty members. Here the story is quite different. In a number of cases, while qualified Faculty were available, qualified Canadian-trained Faculty were extremely difficult to find. This has been true particularly in the Social Sciences, and is reflected in the fact, as evident from Item 2. (c)(ii), that a relatively higher proportion of new Social Science appointees are foreign-trained and have foreign citizenship. It is important to recognize that in many cases, Departments engage non-Canadians simply because in their opinion qualified Canadian candidates are not available.

It is perhaps useful to comment briefly upon the question of the lack of Canadian-trained Faculty members in certain fields. The basic reason would seem to be the fact that historically in these areas adequate graduate training has not been available in Canada. The result has been that the best students have gone abroad for their graduate education, and many have chosen not to return. Until recently this has been the case in the Social Sciences. Although much progress has been made in the past few years, there still remains a difficult period ahead if Canada is to become competitive with the rest of the world, particularly with the United States, in the training of graduate students. It will not be until we can offer comparable graduate training that we can expect to staff Canadian Departments with Canadian-trained Faculty. The training of graduate students in Canada is not only relevant to the staffing of Universities, for in many areas it would seem to be important for both business and government to be in a position to acquire well trained Canadian Ph.D.'s. This would seem to be particularly true in disciplines such as Economics, Political Science, and Sociology, where a knowledge of Canadian institutions and Canadian problems is a necessity if competent advice is to be given to industry and government.

AGENDA ITEM -

2. Factors Affecting Levels of University Support

(c) *Effects of the Academic Marketplace*

- (ii) *Detailed outline of sources of new faculty appointed during the period 15th September, 1969, to 15th September, 1970, including citizenship status and country of first and last degree as per Form K.*

Since Universities are obliged to recognize the provisions of the Ontario Human Rights Code, undue emphasis on nationality as a condition of employment may render the University liable under the terms of the Code.

In a letter dated July 20th, 1970, to President Williams, the University Solicitor expressed the following opinion: "Not only does Section 4 (1) (The Ontario Human Rights Code) expressly prohibit discrimination against any person by reason of race, etc., Section 4 (3) prohibits even an oral enquiry into such matters, if such an inquiry expresses either directly or indirectly any preference, and no requirement may be placed before an applicant, whether oral or otherwise, requiring him to give information as to such matters. From these Sections it appears impossible for a university to give preference to Canadians as such without becoming liable to the penalty prescribed by Section 14 (1)(b). As a matter of fact, it seems to me that with or without such prohibitions, a university would, in the advancement of learning in the most catholic sense, do everything possible to avoid such discriminations. On the other hand, there may be situations wherein a certain amount of discrimination is essential, and Section 4 (4)(b) provides that with respect to educational institutions (among others) the prohibitions are not applicable in the event that considerations of race, etc., are reasonable occupational qualifications. As a rather extreme example, in a course directed to the study of some of the sociological aspects of African life, administration of the course by a person of African birth as background might be preferred over administration by a Canadian otherwise equally qualified. In summation, it appears clear that the University cannot now discriminate, or conversely give preference by reason only of race, colour, creed, nationality, ancestry or place of origin, except in those instances wherein the University is prepared to establish the existence of a reasonable occupational qualification."

An analysis of the aggregate figures in accompanying Table CUA-70-K reveals that:

1. Less than one-half (45.5%) of the recently appointed Faculty surveyed, were resident in Canada in the year preceding their appointment.
2. There is no significant difference between citizenship status at birth and at date of appointment. Essentially, about one-half of appointments were Canadian citizens and another one-quarter American citizens.
3. That, while 48.7% report Canada as the country of their first degree (about the same percentage as those born in Canada), only 38.6% of the Faculty surveyed report Canada as the country of their last degree. This would support the contention that Canada should strengthen the programs in its graduate schools.
4. That, while the percentages for first and last degree remain about the same for the U.K., the percentage reporting U.S.A. as country of last degree, rises to almost one-half of the total. This suggests that both Canadians and citizens of other countries tend to take their post-graduate training in the U.S.A., rather than in the U.K.

A consideration of the various discipline areas reveals the following information:

Pure Humanities - Almost as many Americans as Canadians by birth were appointed. In addition, 20% were from countries other than Canada, the U.S. and the U.K.

Applied Humanities - Two-thirds of those appointed were Canadian with last degrees obtained in Canada.

Pure Social Science - The faculty in this area is overwhelmingly American. One-half are Americans by birth and almost two-thirds show U.S.A. as country of last degree. This suggests that in this area graduate studies should be strengthened in Canada. This discipline area is particularly significant in that it represents the largest single category amongst reporting faculty.

Applied Social Science - Interestingly enough, in applied Social Science, more than two-thirds of the appointees were Canadian citizens, and although almost one-half still report the U.S.A. as country of last degree, an equal number report Canada as the country of last degree.

Biological Science - U.S. influence in the Pure Biological Sciences is not evident. In the area of Applied Biological Science, Canada appears to be a strong leader.

Physical Science - Whereas the United States makes a significant contribution to graduate work in the Pure Physical Sciences, the United Kingdom does likewise in the Applied Physical Sciences.

FULL-TIME FACULTY APPOINTMENTS DURING PERIOD SEPTEMBER 15th, 1969 TO SEPTEMBER 15th, 1970

This return is requested in order to update the Citizenship Analysis of University Faculty carried out by the C.P.U.O in early 1970. Please note that discipline areas (and programs included within such areas) remain those of the Dominion Bureau of Statistics.

TOTAL	DISCIPLINE AREA	CANADA	UNITED STATES	UNITED KINGDOM	OTHER COMMON-WEALTH	FRANCE	OTHER
<u>AGGREGATE FIGURES</u>							
	- Country of Residence in Year Previous to Appointment	91 (45.5%)	86 (43.0%)	18 (9.0%)	1	1	3 (200)
	- Citizenship Status at date of Appointment	108 (53.7%)	52 (25.9%)	19 (9.5%)	7		15 (201)
	- Citizenship Status at birth	97 (48.3%)	50 (24.9%)	23 (11.4%)	8		23 (201)
	- Country of 1st Degree	96 (48.7%)	55 (27.9%)	23 (11.7%)	8		15 (197)
	- Country of last Degree	76 (38.6%)	88 (44.7%)	22 (11.2%)	3	3	5 (197)
<u>BREAKDOWN BY DISCIPLINE AREA</u>							
<u>FACULTY ADMINISTRATION</u>							
	- Country of Residence in Year Previous to Appointment						
	- Citizenship Status at date of Appointment						
	- Citizenship Status at birth						
	- Country of 1st Degree						
	- Country of last Degree						
<u>HUMANITIES</u>							
	- Country of Residence in Year Previous to Appointment	16 (38.1%)	20 (47.6%)	3 (7.1%)	1	1	2 (42)
	- Citizenship Status at date of Appointment	18 (42.9%)	14 (33.3%)	3 (7.1%)	1		6 (42)
	- Citizenship Status at birth	16 (38.1%)	14 (33.3%)	4 (9.5%)	1		7 (42)
	- Country of 1st Degree	16 (40.0%)	13 (32.5%)	4 (10.0%)	1		6 (40)
	- Country of last Degree	14 (35.9%)	17 (43.6%)	4 (10.3%)		2	2 (39)
	- Country of Residence in Year Previous to Appointment	8 (100%)					(8)
	- Citizenship Status at date of Appointment	5 (62.5%)		1 (12.5%)	2		(8)
	- Citizenship Status at birth	5 (62.5%)		1 (12.5%)	2		(8)
	- Country of 1st Degree	4 (50.0%)	1 (12.5%)	1 (12.5%)	2		(8)
	- Country of last Degree	5 (62.5%)	1 (12.5%)	1 (12.5%)	1		(8)
<u>SOCIAL SCIENCE</u>							
	- Country of Residence in Year Previous to Appointment	18 (33.3%)	31 (57.4%)	4 (7.4%)	1		(54)
	- Citizenship Status at date of Appointment	16 (29.6%)	26 (48.2%)	6 (11.1%)	2		4 (54)
	- Citizenship Status at birth	15 (27.8%)	25 (46.3%)	4 (7.4%)	2		8 (54)
	- Country of 1st Degree	16 (29.6%)	26 (48.2%)	6 (11.1%)	2		4 (54)
	- Country of last Degree	12 (22.2%)	35 (64.8%)	4 (7.4%)	1		2 (54)

TOTAL	DISCIPLINE AREA	CANADA	UNITED STATES	UNITED KINGDOM	OTHER COMMON-WEALTH	FRANCE	OTHER
	<u>SOCIAL SCIENCE (continued)</u>						
	<u>Applied</u> - Country of Residence in Year Previous to Appointment	14 (53.9%)	11 (42.3%)	1 (3.8%)			(26)
	- Citizenship Status at date of Appointment	20 (76.9%)	2 (7.7%)	1 (3.9%)	2		1 (26)
	- Citizenship Status at birth	18 (69.2%)	2 (7.7%)	3 (11.5%)	2		1 (26)
	- Country of 1st Degree	18 (72.0%)	3 (12.0%)	1 (4.0%)	2		1 (25)
	- Country of last Degree	12 (46.2%)	12 (46.2%)	2 (7.6%)			(26)
	<u>BIOLOGICAL SCIENCE</u>						
	<u>Pure</u> - Country of Residence in Year Previous to Appointment	5 (83.3%)	1 (16.7%)				(6)
	- Citizenship Status at date of Appointment	4 (66.7%)		2 (33.3%)			(6)
	- Citizenship Status at birth	4 (66.7%)		2 (33.3%)			(6)
	- Country of 1st Degree	4 (66.7%)		2 (33.3%)			(6)
	- Country of last Degree	4 (66.7%)		1 (16.7%)	1		(6)
	<u>Applied</u> - Country of Residence in Year Previous to Appointment	26 (56.5%)	14 (30.4%)	5 (10.9%)			1 (46)
	- Citizenship Status at date of Appointment	35 (76.1%)	5 (10.9%)	4 (8.7%)			2 (46)
	- Citizenship Status at birth	31 (67.4%)	5 (10.9%)	6 (13.0%)	1		3 (46)
	- Country of 1st Degree	29 (64.4%)	7 (15.6%)	6 (13.3%)	1		2 (45)
	- Country of last Degree	26 (57.8%)	15 (33.3%)	3 (6.7%)			1 (45)
	<u>PHYSICAL SCIENCE</u>						
	<u>Pure</u> - Country of Residence in Year Previous to Appointment	2 (22.2%)	6 (66.7%)	1 (11.1%)			(9)
	- Citizenship Status at date of Appointment	6 (54.6%)	4 (36.4%)				1 (11)
	- Citizenship Status at birth	6 (54.6%)	3 (27.3%)				2 (11)
	- Country of 1st Degree	6 (54.6%)	4 (36.4%)				1 (11)
	- Country of last Degree	1 (9.1%)	7 (63.6%)	2 (18.2%)		1	(11)
	<u>Applied</u> - Country of Residence in Year Previous to Appointment	2 (22.2%)	3 (33.3%)	4 (44.5%)			(9)
	- Citizenship Status at date of Appointment	4 (50.0%)	1 (12.5%)	2 (25.0%)			1 (8)
	- Citizenship Status at birth	2 (25.0%)	1 (12.5%)	3 (37.5%)			2 (8)
	- Country of 1st Degree	3 (37.5%)	1 (12.5%)	3 (37.5%)			1 (8)
	- Country of last Degree	2 (25.0%)	1 (12.5%)	5 (62.5%)			(8)

AGENDA ITEM -

2. Factors Affecting Levels of University Support

(d) *Operating and Capital Support*

- *University comments on policy of maintaining differentiation between operating and capital assistance:*

(i) *On a University basis.*

In attempting to respond to this question, we have endeavoured over several months to examine our own thinking in this regard. Clearly from the University point of view there is a feeling of apprehension concerning the merging of capital and operating assistance and a failure to see any measurable advantages for such a scheme.

Perhaps the University's concern reflects the fact that the Operating Grants Formula is only now "settling in" to the point where its existence is being reflected in the internal management of the University. At the same time the capital formula is only at an interim stage, and what might become a final formula has not been tested to nearly the same degree as the operating formula.

In attempting to assess the relative advantages and disadvantages of merging the grants, we recognize the seeming theoretical value of placing the management of the total financial resources in the hands of the University as one package, which it could use to the best tactical advantage. On the other hand, we cannot convince ourselves that this apparent theoretical advantage can be translated into useful practical application. We all know that in a modern University environment there are extremely strong forces for change counterposed against equally strong forces for continuing the *status quo*. At the same time there is genuine concern about the governance of Universities and the internal management of their affairs. Considering these circumstances together with the evolutionary state of the Capital and Operating Grants Formulae, it is our judgment that any attempt to merge the funding processes at this time would be unfortunate.

We recognize that, from the Government's point of view, it would be desirable to make all segments of the University more acutely aware of the cost of capital money and the continuing need to control the unit cost of capital construction along with all other expenditures. If these objectives

can be best achieved by merging capital and operating funds at the source in one formula, the advantages of doing so could conceivably outweigh the disadvantages of continuing the present differentiated system. We would strongly urge, however, exploration of the assumed benefits against possible disadvantages through appropriate studies in depth over the next two to three years, and that no other action be taken in the interim.

AGENDA ITEM -

3. Future Planning

- (a) *Updating of five year forecast (as submitted in the fall of 1969).*
 - (i) *Undergraduate enrolment forecast for each year to 1975-76 - as per Form L.*

Enrolment projections contained in the submission to CUA in November, 1969, showed that for Western to continue accepting the traditional 9.5% of the first-year students in Ontario would produce an internal student body (excluding Althouse and the Affiliated Colleges) in excess of 19,000 by 1975-76. Such a rapid increase caused concern within the University and to CUA, with the result that Senate decided to control the rate of growth. In the Amended Submission to CUA of December, 1969, the rate of growth was reduced by limiting the increase of the first-year admissions to one half that of the November submission.

The complete enrolment in the various Faculties, including Althouse College and the Affiliated Colleges is presented in Table V. Projections of undergraduate enrolment are presented in Table VI in a step table to show the progression through the years. The projected enrolment in the Faculty of Graduate Studies is shown in more detail in Table VII.

Compared to the projections in the December 1969 Amended Submission these Tables show a number of changes based upon trends identified in the final enrolment for 1969-70 and in the preliminary enrolment for 1970-71.

There has been a notable increase in the number of students with General degrees registering for an additional year of undergraduate study. These have been divided into two categories, Qualifying and Make-Up. Qualifying students are registered with the Faculty of Graduate Studies and are taking undergraduate courses prescribed by a Department to enable them to enter a Masters' program. Make-Up students are taking courses of their own selection for a variety of reasons, some in the hope of being accepted by a graduate school, some to qualify for Type A certification in Althouse College of Education or another College of Education, and some because they choose to round out their University education with a selection of traditional courses after a more permissive first three years. In 1970-71 it is anticipated these combined categories

will total close to 400 students and this number is expected to increase steadily over the next five years.

Another factor tending to increase enrolment is the increase in admissions from other Universities or Colleges of Applied Arts and Technology. This has contributed to an increase in the transfer rate into second year from 90% to 93%. To compensate for this upward pressure on the enrolment, which is felt mainly in the Faculties of Arts, Science, and Social Science, the number of first-year students to be admitted in the latter part of the forecast period has been reduced.

The distribution between the Faculties of Arts, Science, and Social Science is similar to the previous projection. The proportions at the end of the forecast period are Arts 17%, Science 29%, and Social Science 54%.*

The projected enrolment in Engineering is slightly less, reflecting the general provincial slowing in the rate of increase of demand for Engineering places. In the Health Sciences Faculties there has been an increase in the projections for Medicine and Nursing but a decrease in the number of interns due to a reclassification that excludes certain types of teaching fellows.

The Faculty of Graduate Studies projections have been reduced by about 10%. This is the result of a number of factors, including a growing awareness of a limitation in employment opportunities for graduates in a number of disciplines, and a restriction in the financial support available for graduate students. The increase for Althouse College in 1972-73 from 800 to 1200 students is an estimate dependent upon the incorporation of London Teachers' College and Althouse College into a Faculty of Education by that date.

Table CUA-70-L gives the requested long-term enrolment data.

* See Table XV

THE UNIVERSITY OF WESTERN ONTARIO
ENROLMENT PROJECTIONS

Revised, September 21st, 1970

	ACTUAL			PROJECTED					
	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
<u>UNDERGRADUATES</u>									
Arts	1204	1136	1256	1348	1488	1583	1653	1705	1735
Social Science	2217	2852	3361	3970	4448	4804	5091	5335	5505
Natural Science	1418	1621	1904	2172	2424	2609	2754	2878	2955
<i>SUB-TOTAL</i>	<i>4839</i>	<i>5609</i>	<i>6521</i>	<i>7490</i>	<i>8360</i>	<i>8996</i>	<i>9498</i>	<i>9918</i>	<i>10195</i>
Business Administration	144	135	169	200	205	205	215	230	230
Engineering Science	303	369	453	445	490	515	555	595	625
Law	202	254	312	370	380	380	380	380	380
Music	145	188	240	295	295	320	350	400	460
<i>SUB-TOTAL</i>	<i>794</i>	<i>946</i>	<i>1174</i>	<i>1310</i>	<i>1370</i>	<i>1420</i>	<i>1500</i>	<i>1605</i>	<i>1695</i>
Health Sciences:									
Medicine	282	304	315	325	335	340	355	370	385
Medical Rehab.	6	23	40	63	86	113	139	151	156
Dentistry	15	48	88	134	177	198	208	208	208
Dental Hygiene	-	-	-	-	-	20	40	60	60
Nursing	171	158	177	200	247	285	334	382	415
<i>SUB-TOTAL</i>	<i>474</i>	<i>533</i>	<i>620</i>	<i>722</i>	<i>845</i>	<i>956</i>	<i>1076</i>	<i>1171</i>	<i>1224</i>
<i>TOTAL DEGREE</i>	<i>6107</i>	<i>7088</i>	<i>8315</i>	<i>9522</i>	<i>10575</i>	<i>11372</i>	<i>12074</i>	<i>12694</i>	<i>13114</i>
Make-up Year	47	93	138	180	220	260	290	320	350
Qualifying Year	98	85	149	190	240	270	300	330	360
<i>TOTAL</i>	<i>6252</i>	<i>7266</i>	<i>8602</i>	<i>9892</i>	<i>11035</i>	<i>11902</i>	<i>12664</i>	<i>13344</i>	<i>13824</i>
Medical Internes	136	186	228	218	228	252	292	322	340
<u>GRADUATES</u>									
Full-Time Masters	703	855	998	1117	1229	1293	1375	1430	1511
Full-Time Ph.D.	312	375	435	478	546	589	630	672	710
<i>TOTAL</i>	<i>1015</i>	<i>1230</i>	<i>1433</i>	<i>1595</i>	<i>1775</i>	<i>1882</i>	<i>2005</i>	<i>2102</i>	<i>2221</i>
Journalism Diploma	14	12	15	20	25	30	35	40	45
<i>TOTAL CONSTITUENT UNIVERSITY F.T.</i>	<i>7417</i>	<i>8634</i>	<i>10278</i>	<i>11725</i>	<i>13063</i>	<i>14066</i>	<i>14996</i>	<i>15808</i>	<i>16430</i>
Brescia College	311	327	307	300	300	300	300	300	300
Huron College	488	479	510	550	600	600	600	600	600
King's College	249	264	448	630	800	900	1000	1100	1200
Althouse College	303	505	652	800	800	1200*	1200	1200	1200
<i>TOTAL F.T.</i>	<i>1351</i>	<i>1575</i>	<i>1917</i>	<i>2280</i>	<i>2500</i>	<i>3000</i>	<i>3100</i>	<i>3200</i>	<i>3300</i>
<i>UNIVERSITY TOTAL F.T.</i>	<i>8768</i>	<i>10269</i>	<i>12195</i>	<i>14005</i>	<i>15563</i>	<i>17066</i>	<i>18096</i>	<i>19008</i>	<i>19730</i>
<u>PART-TIME</u>									
Undergraduate F.T.E.	908	1046	1172	1360	1420	1550	1680	1810	1940
Graduate F.T.E.	72	67	86	102	109	118	125	132	142
<i>CONSTITUENT UNIVERSITY TOTAL F.T.E.</i>	<i>9748</i>	<i>11382</i>	<i>13453</i>	<i>15467</i>	<i>17092</i>	<i>18734</i>	<i>19901</i>	<i>20950</i>	<i>21812</i>
Net Result Shared Teaching F.T.E.	242	265	226	230	230	230	230	230	230
<i>CONSOLIDATED F.T.E.</i>	<i>9990</i>	<i>11647</i>	<i>13679</i>	<i>15697</i>	<i>17322</i>	<i>18964</i>	<i>20131</i>	<i>21180</i>	<i>22042</i>

*Includes integration of London Teachers' College proposed for 1972-73.

ESTIMATE OF UNDERGRADUATE ENROLMENT

Revised September 21st, 1970

Year	I Population in Year (x)	% Transfer + 1/2%	II Population in Year (x + 1)	% Transfer + 1/2%	III Population in Year (x + 2)	% Transfer + 1/2%	IV Population in Year (x + 3)	IV Make-up Year	IV Qualifying Year	V Professional	VI Professional	Total	Year
1964-65										137	55	6252	1967-68
1965-66	1559	84	1310	111	1454	41	599	47	98	143	74	7266	1968-69
1966-67	1742	85	1481	100	1474	42	619	93	85	143	84	8602	1969-70
1967-68	2054	87	1774	101	1808	42	743	138	149	200	80	9892	1970-71
1968-69	2068	90	1879	102	1923	42	814	180	190	220	85	11035	1971-72
1969-70	2565	94	2399	100	2400	41	994	220	240	220	127	11902	1972-73
1970-71	3023	93	2820	100	2820	41	1147	260	270	220	137	12664	1973-74
1971-72	3208	93	3012	100	3012	41	1232	290	300	229	137	13344	1974-75
1972-73	3444	93	3206	100	3206	41	1330	320	330	252	137	13824	1975-76
1973-74	3660	93	3420	100	3420	41	1418	350	360	269			
1974-75	3850	93	3605	100	3605								
1975-76	3950	93	3685										
	4000												

Table VI

THE UNIVERSITY OF WESTERN ONTARIO

FACULTY OF GRADUATE STUDIES

FORECAST OF FULL-TIME MASTERS AND DOCTORAL ENROLMENT
AND PREREQUISITE, PART-TIME, AND NON-RESIDENT STUDENTS

Revised, September 21st, 1970

	ACTUAL			PROJECTED					
	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
<u>ARTS</u>									
General	77	106	153	178	197	208	221	227	233
Music	-	1	3	10	16	18	27	29	30
<i>SUB-TOTAL</i>	<i>77</i>	<i>107</i>	<i>156</i>	<i>188</i>	<i>213</i>	<i>226</i>	<i>248</i>	<i>256</i>	<i>263</i>
<u>BIOSCIENCES</u>									
Health Sciences	90	122	121	135	140	150	160	170	185
Botany and Zoology	57	64	65	68	76	81	86	90	93
P.H.E.	6	6	24	24	25	27	29	31	32
Psychology	42	49	62	63	63	68	71	74	77
<i>SUB-TOTAL</i>	<i>195</i>	<i>241</i>	<i>272</i>	<i>290</i>	<i>304</i>	<i>326</i>	<i>346</i>	<i>365</i>	<i>387</i>
<u>PHYSICAL SCIENCES</u>									
General	199	233	237	248	270	290	310	330	347
Engineering Science	52	75	77	93	103	110	115	120	123
<i>SUB-TOTAL</i>	<i>251</i>	<i>308</i>	<i>314</i>	<i>341</i>	<i>373</i>	<i>400</i>	<i>425</i>	<i>450</i>	<i>470</i>
<u>SOCIAL SCIENCES</u>									
General	91	123	118	140	207	232	270	297	355
Geography	31	46	46	54	63	64	65	68	69
Business Admin.	318	356	379	419	451	460	470	480	485
M.L.S. Program	40	46	140	157	156	164	170	173	177
M.Sc.N. Program	12	3	8	6	8	10	11	13	15
<i>SUB-TOTAL</i>	<i>492</i>	<i>574</i>	<i>691</i>	<i>776</i>	<i>885</i>	<i>930</i>	<i>986</i>	<i>1031</i>	<i>1101</i>
MASTERS & DOCTORS (F.T.)	1015	1230	1433	1595	1775	1882	2005	2102	2221
PREREQUISITES (QUALIFYING) F.T.	98	85	149	190	240	270	300	330	360
TOTAL PART-TIME AND NON-RESIDENT	240	223	253	329	354	382	406	431	462

LONG-TERM ENROLMENT DATA
to
1975-76

September 21st, 1970

Instructions:

1. Please complete this report in a manner consistent with the enrolment categorization scheme and definitions reflected on the regular D.U.A. Enrolment Reports (Forms UA3). Note particularly, however, the precise requirement under item (i) which is for registration in the 1st University year subsequent to Grade 13 into undergraduate degree Programs only.
2. For the University of Guelph and the University of Waterloo, separate reports are requested representing "Fall Term, on campus", Fall Term "on and off" campus (Waterloo), and Equivalent Full-Time (adjustment for Co-operative and Trimester Systems) bases for enrolment.
3. For constituent Universities with Federated or Affiliated Institutions, Full-Time Enrolment must take into account net teaching service performed for these Institutions, and will therefore be stated in terms of F.T.E. for teaching services performed (Toronto, Waterloo, Western and Laurentian).
4. Enrolments in university programs in education should be excluded from total University figures provided but should be reported on a separate Form CUA-70-L.

<u>1969-70</u>	<u>1970-71</u>		<u>1971-72</u>	<u>1972-73</u>	<u>1973-74</u>	<u>1974-75</u>	<u>1975-76</u>
		*(i) Full-Time "Freshman Intake" (i.e. 1st Year Undergraduate Degree)					
3149	3348		3564	3780	3970	4070	4120
		(ii) Total Full-Time Undergraduate (including diploma and other non-degree and make-up or qualifying year)					
9056	10336		11493	12384	13186	13896	14394
		** (iii) Total Graduate (Fall-Term)					
1448	1615		1800	1912	2040	2142	2266
		(iv) Total Full-Time Enrolment (ii plus iii)					
10504	11951		13293	14296	15226	16038	16660
		(v) F.T.E. of Part-Time Enrolment using Formula Conversion Factors (including "Summer School" Graduate Students)					
1258	1462		1529	1668	1805	1942	2082
		(vi) F.T.E. Enrolment (iv plus v)					
11762	13413		14822	15964	17031	17980	18742
		*** (vii) Total Basic Income Units Under Formula (i.e. Total Weighted Enrolment)					
20769.6	23668		25870	27775	29083	30243	31561

Explanatory Comments outlining variations in above enrolment data as compared with similar forecasts submitted Fall, 1969 (Please deal with both the quantitative parameters of these variations and the reasons for them):

*Includes 1st Year shared teaching load estimated at 120 F.T.E for 1971 to 1975

**Includes Graduate Program in Education (see CUA-70-D)

***Includes Graduate Program in Education weight of 2 B.I.U. each

AGENDA ITEM -

3. Future Planning

- (a) *Updating of five year forecast (as submitted in the fall of 1969).*
- (ii) *Outline of changes in proposed developments since previous forecast, with documentation as to reasons for such changes, and new developments contemplated for 1975-76.*

Reference to the tabular presentation of New Program Developments in Item 3. (c) will reveal several omissions from that presented for the corresponding time period in the 1969 Report. There are many interdependent reasons for these revisions, but in most instances they may be traced back to a lack of physical space, usually attributable to delays in planning or completion of current building projects. None of these omissions would be expected to have any significant effect on enrolment projections.

There are two new developments since the 1969 Report, however, which will in all probability affect the earlier projections. The first, approved by Senate to become effective for the academic year 1970-71, is a series of major changes in the General B.A. Program in the Faculties of Arts, Science, and Social Science (some details of these changes are provided in Item 3. (c).) It is not likely that these changes will make any significant change in the total enrolment projections, especially in view of the limitation on Freshman intake approved for 1970-71. Nevertheless, it is probable that shifts in course enrolment patterns in these three Faculties will develop from certain relaxations in previous requirements for specific subjects or subject-areas in the Program.

The second major development is the proposal now before Senate to create a Faculty of Education in 1971-72. In response to the recommendations of the Minister of Education that the preparation of Elementary School Teachers should require a university degree and that the universities should assume responsibility for teacher-education, a Senate Committee undertook a study of the implications of incorporation of the London Teachers' College. The essential recommendations of the Report are that the London Teachers' College should be incorporated into the University by negotiation with the Department of Education, and that the London Teachers' College and Althouse College of Education be integrated and reorganized into a Faculty of Education in the constituent University.

AGENDA ITEM -

3. Future Planning

- (b) *Capital requirements - as per interim capital reporting schedules (Forms M - 1 to 4).*

The Committee on Operational Planning recommends that the University request funds to build a further 243,000 ASF during the period 1970-75, over and above the 429,457 ASF which is at present under construction or has received DUA Final Approval, Tentative Approval or Approval in Principle. Thus the total building required in the period is 672,957 ASF. This figure should be compared with the corresponding estimate in our Amended 1969 Submission to CUA of 658,540 ASF (i.e. 814,540 ASF less 156,000 ASF for the Weldon Library which is regarded as completed for the purposes of the present report).

An increased requirement of approximately 14,400 ASF will be noted and this is the net effect of three changes in the situation since last year. First, although the total enrolment figures now projected for 1975-76 differ very little from those projected last year, the internal distribution has altered. The anticipated undergraduate enrolment for Science in 1975-76 has increased and that for Social Science decreased, in each case by about 100 students. Further the proportion of make-up and qualifying year students in the undergraduate total has gone up significantly. Both of these modifications result in a higher proportion of more heavily weighted students and an increase in entitlement of Basic Space Units. Second, the DUA discount of space for over-age buildings has also contributed to an increased entitlement. Thirdly, the addition to our allocation inventory of certain space - (Food Service areas in residences and heating plant) has worked in the opposite direction and reduced our claimed increment from present holdings.

The above discussion is framed in terms of assignable area but, of course, it is realized that DUA now considers space expansion in terms of dollars rather than ASF. The cash-flow figures submitted with this report (Tables CUA-70-M 1 to 4) reflect the financed equivalent of the areas involved, but it still seems desirable to carry out basic planning in terms of the latter. At this point, one must emphasize the vital necessity of regularly increasing the

money-space norm, at present 55 dollars/ASF, to keep pace with the increase in cost of building construction. It is appropriate here also to refer to the validity of the scale of weights of the present Interim Capital Formula which has been used in calculating the entitlement claimed (Table CUA-70-N). Both these matters will be discussed in detail elsewhere (see Item 3. (e)(i)).

Another problem requiring early resolution is the position of graduate students in the Basic Health Science departments. These individuals, registered for the M.Sc. or Ph.D. degree, are pure scientists in training just as much as graduate students in, say, Zoology or Botany, yet we are allocated formula space for the latter but not the former. The University may or may not receive equivalent space in the Health Sciences Grants made through the Senior Co-ordinating Committee, but to ensure that the space required to teach these students is not overlooked, we are of the opinion that they should be included in the Capital Grants Formula and excluded from the Health Science submissions. The students concerned are after all not "professional" health science students in the sense of, say M.D. students, and should be treated on the same basis as other Science graduate students.

Despite the relatively small changes in enrolment projections referred to above, the general remarks on trends in enrolment distribution, contained in our 1969 submission to CUA, remain valid. Rapid relative expansion continues in Social Science, the expansion in Science continues to parallel that of the University as a whole, and there is a decline in the expansion rate of Arts. These trends are reflected in the proposed Building Program. The fraction of the requested new space entitlement to go to Science has been raised and that for some other units of the University reduced, to ensure a more equitable internal distribution between "new" and "reallocated" space.

The details of the space calculations are summarized in the accompanying Figures and Tables. In making the calculations, we have derived the weighted enrolment according to the instructions provided with forms DUA-70-N and CUA-70-N from the Finance Branch of the Department of University Affairs. We have noted with dismay that no space entitlement for part-time students was authorized in these instructions, although the Department of Architectural Services of DUA indicates that an allocation for these students is granted on the basis of 24 ASF

per FTE for part-time students. If indeed this much-needed allocation is made, our space entitlement for 1975-76, and hence our building increment up to that year, increases by 49,968 ASF, or a value of \$2,748,000.

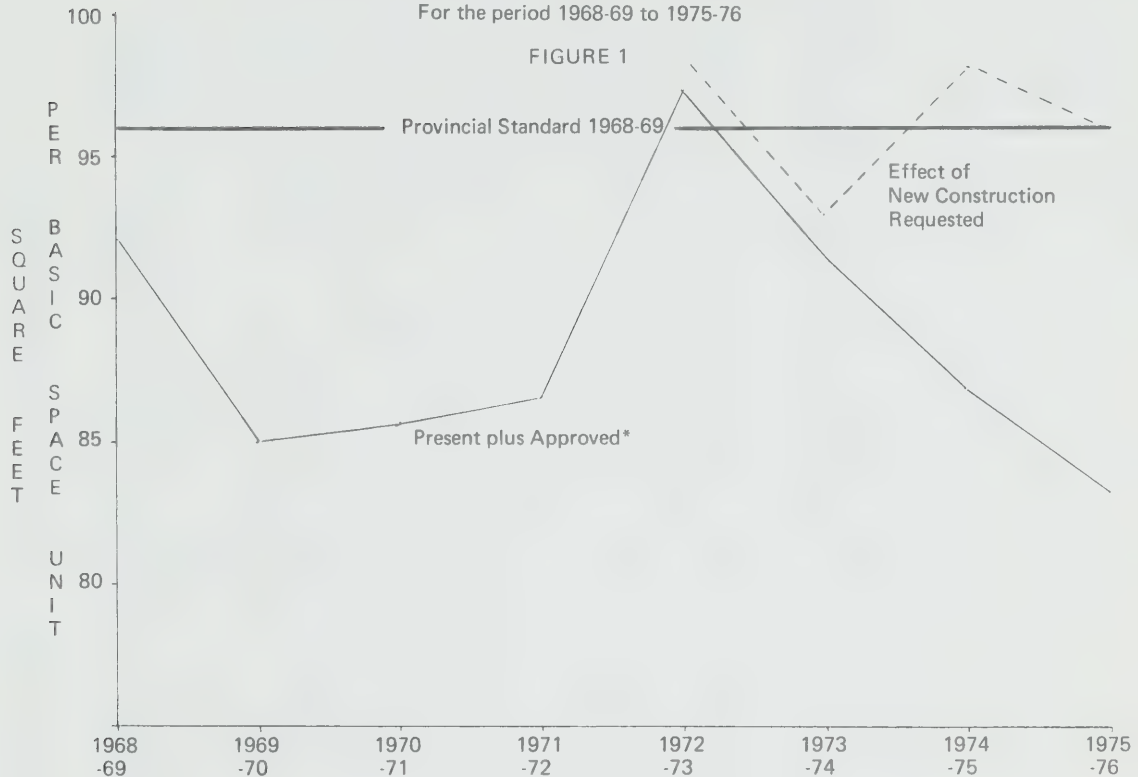
Figures 1 and 2 are graphs comparing the space situation under the building program as it stands at present, together with the improvement and achievement of Provincial Standard by 1975-76 if our claims are met. Table VIII gives for the whole University the year-by-year space ratios to 1975-76, if no more space is built than has at present received at least Approval in Principle. Table IX outlines the calculations required to obtain the space increment for each major University unit that would in 1975-76 give our claimed entitlement. Table X summarizes the Building Program as it exists at present (Phase I) and the proposed new building (Phases II and III).

In conclusion then, one can say that there is little fundamental change in total from our space requests of 1969, although there is a small increase in our claimed entitlement for 1975-76. On the other hand, for essentially internal reasons, there are suggested changes in the distribution of our claimed new space.

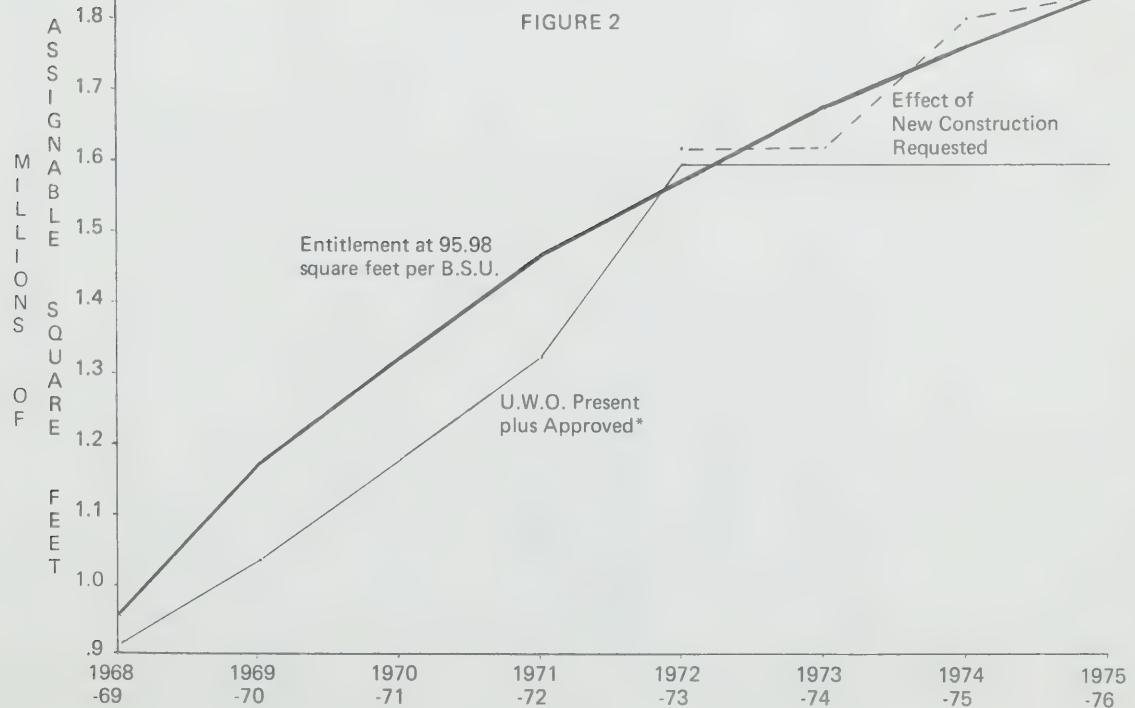
THE UNIVERSITY OF WESTERN ONTARIO

Excludes Health Sciences, Affiliated Colleges, Althouse College
of Education, London Teachers' College, Residences (except Food Service facilities)

COMPARISON OF U.W.O. ASSIGNABLE SPACE PER BASIC
SPACE UNIT TO PROVINCIAL STANDARD
For the period 1968-69 to 1975-76



COMPARISON OF ASSIGNABLE SPACE ENTITLEMENT (95.98 ASF/BSU)
TO PRESENT SPACE PLUS APPROVED* SPACE
For the period 1968-69 to 1975-76



*Approved = Final Approval, Tentative Approval, Approval in Principle

ASSIGNABLE SPACE RATIOS¹

Effect of Introducing Buildings Having Final Approval, Tentative Approval and Approval in Principle

	<u>1968-69</u>	<u>1969-70</u>	<u>1970-71</u>	<u>1971-72</u>	<u>1972-73</u>	<u>1973-74</u>	<u>1974-75</u>	<u>1975-76</u>
Total Assignable Space	911,433	1,032,003	1,173,287	1,316,744	1,586,780	1,586,780	1,586,780	1,586,780
Total Students ²	8,146	9,688	10,848	12,035	12,884	13,635	14,306	14,835
Total B.S.U.'s	9,893	12,145.5	13,716.5	15,213	16,307	17,342.5	18,278	19,066.5
A.S.F. Per Student	111.88	106.52	108.16	109.41	123.16	116.38	110.92	106.96
A.S.F. Per B.S.U.	92.13	84.97	85.54	86.55	97.31	91.50	86.81	83.22

Total A.S.F. needed to meet Provincial Standard

Space entitlement on basis of Provincial Standard of 95.98 ASF/BSU

Deficit from Provincial Standard

Notes:

1. Excludes Health Sciences, Affiliated Colleges, Althouse College of Education, London Teachers College, Residences (except Food Service Facilities).
2. Excludes Health Science Graduate in addition to Undergraduate Students. Enrolments for 1970-71 to 1975-76, inclusive, are based on Form DUA - 70 - N.

RECOMMENDED ALLOTMENTS OF SPACE SHOWING EFFECT OF CURRENT BUILDING PROGRAMME

Excludes Health Sciences, Affiliated Colleges, Althouse College of Education, London Teachers College, Residences (except Food Service Facilities)

	<u>1970-71 Total Permanent</u> 1	<u>1975-76 Total Recommended Allotment</u> 2	<u>Net Permanent Plus D.U.A. Tentative or Final Approval</u> 3	<u>Column 3 Plus D.U.A. Approval in principle</u> 4	<u>Increment to be Constructed 2 minus 4 5</u> 5
Arts	111, 807	197, 221	197, 644	197, 644	(423)
Social Sciences (ex P.H.E.)	210, 406	349, 323	255, 347	255, 347	93, 976
P.H.E.	18, 324	29, 488	17, 610	17, 610	11, 878
Science	296, 719	466, 610	319, 623	321, 466	145, 144
Music	25, 624	49, 076	41, 276	41, 276	7, 800
Business	68, 784	73, 142	67, 210	67, 210	5, 932
Engineering	56, 779	93, 669	95, 229	95, 229	(1, 560)
Law	38, 442	37, 270	37, 915	37, 915	(645)
School of Library and Information Science	18, 185	19, 105	17, 771	17, 771	1, 334
Athletics	55, 617	108, 511	53, 189	92, 389	16, 122
Space to be re-allocated ⁶	43, 415	-	95, 794	89, 416	(89, 416)
Residual Auxiliary Academic ⁷	8, 721	-	8, 721	8, 721	(8, 721)
Academic Services	19, 135	41, 777	22, 372	28, 745	13, 032
Administration	194, 167	336, 899	187, 203	288, 249	48, 650
Other Space ⁸	<u>29, 068</u>	<u>27, 912</u>	<u>27, 792</u>	<u>27, 792</u>	<u>120</u>
	1, 195, 193	1, 830, 003	1, 444, 696	1, 586, 780	
Internal Adjustments ⁹	5, 482	-	-	-	243, 223
Increment to be constructed ¹⁰	-	-	-	-	
D.U.A. Inventory without Discounts	1, 200, 675	-	-	-	
Discounted Space ¹¹	<u>(27, 388)</u>				
Net D. U. A. Inventory	<u>1, 173, 287</u>	<u>1, 830, 003</u>	<u>1, 444, 696</u>	<u>1, 586, 780</u>	

Table IX

FOOTNOTES TO TABLE IX

1. 1970-71 Total Permanent

Includes net faculty space, allocated library, classrooms and reading rooms. Weldon Library is included in the allocations and Lawson is shown as unassigned (net of 16,388 sq. ft. loss on conversion).

2. Total Recommended Allotment

Internal allotment of space computed on a basis consistent with 1969 submission to C.U.A., recognizing revised enrolment projections and the addition of Heating Plant and Residence Food Service space to D.U.A. Inventory.

3. Net Permanent Plus D.U.A. Tentative or Final Approval

shows the effect of:

- a. Adding to Permanent Space buildings that have received D.U.A. Tentative or Final Approval (Engineering and Mathematics, Music, Social Sciences I & II).
- b. Allocating "Internal Adjustments".
- c. Discounted Space in University College, Physics Building, 1383-1389 Western Road, Heating Plant, Lawson Memorial Library.

4. Column 3 Plus D.U.A. Approval in Principle

Shows effect of adding Bridge Building, Services Building, Commissary and University funded portion of U.C.C.

5. Increment to be Constructed

Space needed to bring each division up to recommended allotment.

6. Space to be Re-allocated

Represents a holding category for space available for reassignment arising from the move of Departments into new buildings.

7. Residual Auxiliary Academic

Space shown under this classification represents the portion of Weldon Library allocated to Health Sciences.

8. Other Space

General space classified as lounges, reading rooms, cloakrooms scattered throughout the University.

9. Internal Adjustments

Adjustment necessary to reconcile occupied space that is not on D. U. A. Inventory.

10. Increment

1975-76 Increment to reach provincial standard:

	1, 830, 003	(standard)
less	<u>1, 173, 287</u>	(D. U. A. Inventory)
	656, 716	
plus	<u>16, 000</u>	(loss on conversion of Lawson)
	<u><u>672, 716</u></u>	

This may be compared with COOP '69 Building Programme
less Weldon - 658,540 a.s.f.

11. Discounted Space

Column 1 includes:	University College	12, 000 a. s. f.
	Physics Building	12, 000
	1383-1389 Western Road	1, 288
	Heating Plant	<u>2, 100</u>
		<u><u>27, 388 a. s. f.</u></u>

Column 3 includes the effect of loss on conversion of Lawson Memorial Library (16, 000 a. s. f.) in addition to those buildings shown above.

October 1, 1970

BUILDING PROGRAM

	<u>Building</u>	<u>ASF</u>	<u>START</u>	<u>OPEN</u>
Phase1 -	<u>Construction in progress or has received D.U.A. Final Approval, Tentative Approval or Approval in Principle</u>			
	Engineering & Mathematical Sciences(WE-22)	77, 000	1969	1971
	Music (WE 35)	27, 409	1970	1971
	Social Sciences I & II (WE 34)	183, 000	1970	1972
	Bridge Building and Conversion of Lawson (WE 37)	10, 548	1970	1971
	Buildings and Grounds (WE 36)	20, 800	1970	1971
	Commissary (Food Services) (WE 39)	23, 700	1970	1971
	University Community Centre - University Funded Portion (WE 38)	87, 000	1970	1972
Phase2 -	<u>Proposed new buildings to achieve Provincial Standard of 95.98 ASF/BSU</u>			
	Science II & III (UWO 5 & UWO 12)	109, 000	1971	1974
	Athletics (UWO 10)	20, 000	1971	1972
	Art Gallery (UWO 16)	5, 500	1972	1973
Phase3 -	<u>Proposed new buildings to achieve Provincial Standard of 95.98 ASF/BSU</u>			
	Social Science III (UWO 11)	73, 000	1972	1974
	Science IV (UWO 18)	36, 000	1973	1975
		<u>672, 957</u>		

October 1, 1970

PROBABLE CUMULATIVE 5 YEAR CASH FLOW FOR FORMULA CAPITAL PROJECTS WITH FINAL APPROVALS

(SUBSEQUENT TO APRIL 1 - 1969 AND BY MARCH 31 - 1971)

Western
University

Project / No.	Project Name	In \$ 000's		Cash Flow of Financial Assistance in \$ 000's							REMARKS
		Approved Total Expenditure	Total Financial Assistance	Before Mar. 31/70	1970 - 71	1971 - 72	1972 - 73	1973 - 74	1974 - 75		
WE 22	Engineering & Math Additions	5,430	5,159	829*	3,044	1,246	40			* Includes \$171 disbursed before April 1/1969.	
WE 34	Social Sciences Complex (Phases I and II)	10,350	10,350	-	1,288	6,300	2,662	100			
WE 35	Faculty of Music	2,025	2,025	-	640	1,350	35				
WE 36	Buildings & Grounds Phase I (Services)	728	728	-	100	628					
WE 37	Bridge Building (Stevenson-Lawson)	600	600	-	150	450					
WE 38	University Community Centre	4,685	4,685	-	600	2,500	1,535	50			
WE 39	Food Services Commissary	800	800	-	100	700					
	TOTALS	24,618	24,347	829	5,922	13,174	4,272	150			
	CUMULATIVE TOTALS			829	6,751	19,925	24,197	24,347			

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PROBABLE YEARLY 5 YEAR CASH FLOW FOR "FORMULA" CAPITAL PROJECTS WITH FINAL APPROVALS

CUN/70/AT-2

(PRIOR TO MARCH 31 - 1969)

Western
University

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Project No.	(list only those projects requiring additional funds) Project Name	In \$ 000's			Balance of Financial Assistance in \$ 000's				REMARKS
		Approved Total Expenditure	Total Financial Assistance	Probable Financial Assistance to March 31/71	1971 - 72	1972 - 73	1973 - 74	1974 - 75	
WE 20	D. B. Weldon Library	7,220	6,854	5,186	1,568	100			
WE 17	Addition-Business Administration	2,059	1,956	41	-	-			
WE 18	Addition - Faculty of Law	1,195	1,135	21	-	-			
WE 19	Greenhouse	68	65	4	-	-			
WE 21	Observatory	537	510	21	-	-			
WE 25	Glenmore Residences	1,965	1,016	56	-	-			
WE 27	Staging Building	1,085	1,026	53	-	-			
WE 28	Alterations and Equipment	217	207	7	-	-			
	TOTALS	14,346	12,769	5,389	1,568	100			

Ontario Department of University Affairs and Technical Services Branch

PROBABLE YEARLY 5 YEAR CASH FLOW FOR "NON-FORMULA" CAPITAL PROJECTS WITH FINAL APPROVALS

CUA/70/M-3

(AS OF MARCH 31 - 1971)

WESTERN
University

Project No.	(list only those projects requiring additional funds) Project Name	In \$ 000's		Balance of Financial Assistance In \$ 000's					REMARKS (list formula project which correlates)
		Approved Total Expenditure	Total Financial Assistance	Probable Financial Assistance to March 31/71	1971 - 72	1972 - 73	1973 - 74	1974 - 75	
WE 32	Alterations to existing Engineering Building	380	380	-	380				
WE 33	Engineering & Math Addition (WE 22) - Site development and utilities	199	199*	199					* Increased from 189.5 in accordance with Mr. McCullough's advice.
	Sewer and Watermains	363	363	363					
	Chilled Water Plant (South Campus)	580	580	402	178				
	Transformer and Feeder Main	60	60	39	21				
	Unassigned Projects	703	703	-	703				
	Utilities Extension Phase IA 1970-1972 UACP 2 (Jan. 21/70)	1,905	1,905	1,003	902				
	TOTALS	2,285	2,285	1,003	1,282				

PROPOSED CUMULATIVE 5 YEAR CASH FLOW FOR ADDITIONAL PROJECTS

WESTERN
University

FOR INTERIM CAPITAL FORMULA ENTITLEMENT

All Amounts In \$ 000's)

REMARKS: ALL COSTS GIVEN IN 1968 DOLLAR VALUE
NOT INDEXED FOR ESCALATION.

Interim Formula Cumulative Cash Flow Entitlement As Per May 1st, 1970

Total of Probable Cumulative Cash Flow For Formula Projects With Approvals As Of March 31 - 1971											
Project No.	Project Name	Approval Status	Date of Last Approval	Estimated Total Expenditure	(Table M-1) Total Financial Assistance	19,925	24,197	24,347	24,347	24,347	Balance
UWO 5 & 12	SCIENCE, PHASES II and III			7,085	7,085	1,068	4,085	6,085	7,085	13,850	18,653
				7,085	7,085	1,420	(298)	3,002	6,765		Balance
UWO 10	FIELDHOUSE			1,100	1,100	610	1,100	1,100	1,100		Balance
				8,185	8,185	810	(1,398)	1,902	5,665		Balance
UWO 16	ART GALLERY			275	275		175	275	275		Balance
				8,460	8,460		(1,573)	1,627	5,390		Balance
UWO 11	SOCIAL SCIENCE PHASE III			3,870	3,870		400	2,400	3,870		Balance
				12,330	12,330		(1,973)	(773)	1,520		Balance
UWO 18	SCIENCE PHASE IV			1,910	1,910			200	1,200		Balance
				14,240	14,240			(973)	320		Balance
	PROJECTS WITH PRIORITY NOT YET ASSIGNED			4,413	4,413						Balance
				18,653	18,653						Balance
PROJECTS INCLUDED ARE THOSE WHICH ALLOCATE OUR A.S.F. ENTITLEMENT						STUDENTS ONLY.					
ACCORDING TO FORM DUA 70-N WHICH IS BASED ON FULL-TIME											

PROBABLE YEARLY 5 YEAR CASH FLOW FOR "NON-FORMULA" CAPITAL PROJECTS WITH FINAL APPROVALS

CUA/70/M-3
Revised

AFTER MARCH 31 - 1971)

WESTERN
University

Balance of Financial Assistance In \$ 000's										
Project No.	(list only those projects requiring additional funds) Project Name	Estimated Total Expenditure	Total Financial Assistance	Probable Financial Assistance to March 31/71	In \$ 000's					REMARKS (list formula project which correlates)
					1971 - 72	1972 - 73	1973 - 74	1974 - 75	Subsequent	
	Althouse College of Education - Air Conditioning and Site Improvement	1,017			1,017					
	London Teacher's College Air Conditioning and Fire Marshall's Requirements	550			550					
	TOTALS	1,567			1,567					

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PROBABLE YEARLY 5 YEAR CASH FLOW FOR "NON-FORMULA" CAPITAL PROJECTS WITH FINAL APPROVALS

CUA/70/M-3
Revised

(AFTER MARCH 31 - 1971)

WESTERN
University

Balance of Financial Assistance In \$ 000's										
Project No.	(list only those projects requiring additional funds) Project Name	In \$ 000's			Balance of Financial Assistance In \$ 000's				Subsequent	REMARKS (list formula project which correlates)
		Estimated Total Expenditure	Total Financial Assistance	Probable Financial Assistance to March 31/71	1971 - 72	1972 - 73	1973 - 74	1974 - 75		
	Utility Extension Phase I (B)	775	775			600	175			
	Phase II	86	86					86		
	Lawson Conversion	1,200	1,200		800	400				
	Stevenson Hall Conversion	100	100			100				
	Somerville Conversion (Bookstore)	65	65		65					
	Services & Site Work for Commissary	50	50		50					
	Kitchen Repairs After Commissary Completion	50	50		50					
	Land Acquisition	400	400	46	154	200				
	Alterations due to re-allocation of vacated space in Physics, Nat. Science, Staging Bldg., and Alumni Hall	306	306		250	56				
	TOTALS	3,032	3,032	46	1,369	1,356	175	86		

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INSTITUTION: University of Western Ontario

FORM CUA-70-N

September 29, 1970

WEIGHTED ENROLMENT FOR PURPOSES OF THE

INTERIM CAPITAL FORMULA

SUMMARY

Weighting Categories: Capital Weighting Scheme						
	A 1.0	B 1.5	C 2.0	D 3.0	E 4.0	TOTAL WEIGHTED ENROLMENT
1970-71	7199.0	4522.5	290.0	753.0	952.0	13716.5
1971-72	8004.0	4926.0	432.0	819.0	1032.0	15213.0
1972-73	8516.0	5343.0	484.0	876.0	1088.0	16307.0
1973-74	8873.0	5815.5	572.0	942.0	1140.0	17342.5
1974-75	9175.0	6276.0	636.0	975.0	1216.0	18278.0
1975-76	9328.0	6721.5	752.0	1005.0	1260.0	19066.5

AGENDA ITEM -

3. Future Planning

(c) *Brief descriptive outline of proposed new programs:*

(i) *For 1971-72*

(ii) *For 1972-73.*

In response to the annual request, each academic unit of the University has submitted an up-dated and revised report of its proposals for new programs of study for the current projection period. These submissions have been reviewed by the Senate Committee on Academic Program Policy in the light of enrolment projections, availability of resources, and the increasing limitations imposed by the operating and capital grants formulae.

A summary of these new developments is presented in the accompanying Table XI. It will be noted that all of the proposals, with the exception of one major development (Education) and two minor revisions, were included in the 1969 Report of this University. More importantly, there are several significant omissions from the projections made last year arising in no small measure from the need for reassessment and establishment of priorities consequent on the Interim Capital Formula.

Within the broad established academic framework of the University the detailed nature of its various programs and individual courses exists in a continuous state of flux. Several changes for the 1969-70 academic year were indicated in last year's Report and there are several scheduled for introduction in the 1970-71 academic year. These include, for example, significant revisions in the course content of the Honours Programs in Chemistry, English, Fine Art, Geophysics, Music, and Physical and Health Education (with many of the changes in accordance with a developing policy for incorporating increased flexibility to permit shaping of Programs to meet individual needs and interests).

Developments in the form of experimental-type courses, or of areas new to this University, continue to be made. In this context mention might be made of the course "Contemporary Man in Society" to be offered by the Faculty of Social Science in 1970-71 and "Man and his Environment", an inter-Faculty course focussing on scientific, sociological and legal aspects of

pollution, under consideration for offering in 1971-72. Anthropology will be offered in the form of an Introductory course for the first time in 1970-71; it is anticipated that further courses will be made available in 1971-72 and 1972-73. Two additional courses in Film, under the aegis of the English Department, have been approved for 1971-72.

In addition to these revisions, Senate approved several significant changes in the basic, three-year General B.A. Program of the Faculties of Arts, Science, and Social Science. It is anticipated that these may result in rather dramatic changes in the general enrolment patterns and course selections of individual students. In brief these changes include :

- (a) Reduction of the First Year General Program from six to five courses with course selection from each of two of the Faculties of Arts, Science, and Social Science.
- (b) Revision of the requirements for graduation by elimination of the former specific course requirements and the requirement of a "Major Subject" or "Area of concentration" (although the latter may still be followed if desired).

Resulting, in part at least, from these important changes in the General Program, there has been an intensification in the normal continuing review of the Honours Program in the Faculties of Arts, Science, and Social Science.

Concomitant with these developments is the anticipated expansion of several of the important academic service units. For the current year, 1970-71, the Talbot Theatre rehearsal and storage areas have already been enlarged to provide for the full development of a Drama Workshop. Projected for the following year, 1971-72, are the creation of a Centre for Instructional Media and a much needed expansion of the Computing Centre.

ACADEMIC UNIT	YEAR	1971 - 72	1972 - 73
ARTS		<p><u>FINE ART:</u> Introduction of a B.F.A. Four-year Honors Degree Program to complement present 3 and 4 year programs in Art History and Studio work. New program designed for those who hope to train as creative artists in the intellectual and cultural environment of the University with the emphasis on more intensive studio training.</p>	<p><u>RUSSIAN STUDIES:</u> M.A. Program - Proposed courses would include: Old Church Slavonic; Seminar in selected authors; Seminar in Early Russian Romanticism; Seminar in Old Russian Literature.</p>
SCIENCE		<p><u>APPLIED MATHEMATICS HONORS PROGRAM -</u> Additional 4th year options: a) Numerical Analysis - differs from present streams by replacing certain courses in Physical Sciences with selected courses in Engineering and Computer Science. b) Applied Mathematics with Chemistry - Content will be analogous to the present theoretical physics stream but with heavier weight being given to Chemistry courses in place of Physics.</p> <p><u>BIOLOGY:</u> Introduction of a Three Year B. Sc. Degree Program - A cooperative development of Botany and Zoology Departments along with the five Basic Science Departments of the Faculty of Medicine. Emphasis on development around 3 core courses, containing a broad introduction to the essentials of Biology, and optional selections from all seven Departments.</p>	<p><u>APPLIED MATHEMATICS</u> Additional 4th year option: Applied Mathematics and Business.</p> <p><u>COMPUTER SCIENCE:</u> Ph.D. Graduate Program This program is to emphasize four areas of research: Computational Mathematics; Information Systems; Formal Languages; and Artificial Intelligence. Two new graduate courses are planned, one in Artificial Intelligence and the other in Computer Assisted Instruction.</p>
SOCIAL SCIENCE		<p><u>PSYCHOLOGY:</u> Ph.D. Program - Development of new areas of specialization: Counselling Psychology and Clinical-Community Psychology.</p> <p><u>POLITICAL SCIENCE:</u> Ph.D. Program - Designed to offer advanced study in three general areas: Political Theory, Canadian Government and Politics, and Urban and Regional Government (with special emphasis on this last area to meet the growing demands at all levels of public service).</p>	<p><u>PHYSICAL AND HEALTH EDUCATION (P.H.E.):</u> Ph.D. Program - Will focus on the physical health and well-being of Man throughout the entire age span; a generalistic approach to the study of physical and health education.</p> <p><u>SOCIOLOGY:</u> Ph.D. Program - Extension of M.A. core areas of Theory, Methodology, and Social Organization and the specialty areas of Population Studies, Medical Sociology, and Social Psychology.</p>
ENGINEERING		<p>Introduction of M. Eng. Programs in: <u>APPLIED MECHANICS</u> - areas of concentration will be vibrations, relevant to structures and high-speed machinery, and acoustics and noise abatement which would augment current air/water pollution studies and enlarge scope of existing environmental engineering studies.</p> <p><u>POWER ENGINEERING</u> - Advanced Mechanical Engineering courses in heat transmission, power plant design, nuclear power engineering, energy conversion systems, controls, refrigeration, air conditioning.</p> <p><u>PRODUCTION ENGINEERING</u> - Strong emphasis on management techniques applied to manufacturing processes, including operation research, computer applications, economics and statistics.</p>	<p><u>M.E. Sc. Program in Biomedical Engineering:</u> Joint committees of Engineering, Medicine and Science working on developing the program which will cover a number of areas but be based largely on courses and research already existing.</p>
HEALTH SCIENCE		<p><u>DENTAL HYGIENE:</u> Four Year Baccalaureate Degree Program - Following one general year in the Faculty of Science will be three years in Faculty of Dentistry for development of a program which will meet the standards of accreditation of the Council on Education of the Canadian Dental Association.</p> <p><u>ORTHODONTICS:</u> M. Clin. Dent. Graduate Program - A 22 month, non-thesis program designed to provide substantial knowledge and experience in depth in Orthodontics and the Basic Sciences leading to it and to enhance the candidates capacity for critical analysis of developments in Orthodontics.</p> <p><u>MEDICAL REHABILITATION - OCCUPATIONAL THERAPY</u> A four year baccalaureate program with one year in the University General Program followed by three in the Faculty of Medicine. The curriculum will include courses in Behavioral Sciences, Biological Sciences, and Occupational Therapy theory and practice.</p>	
LIBRARY AND INFORMATION SCIENCE		<p><u>Introduction of Ph.D. Program -</u> A cooperative development with the Library Schools of the Universities of Toronto and Ottawa. Program will include courses in several aspects of library and information science with the main emphasis on the requirement of a scholarly dissertation in an approved area of research.</p>	
EDUCATION		<p><u>FACULTY OF EDUCATION:</u> Negotiated incorporation of London Teachers College followed by integration and reorganization of Althouse College of Education and London Teachers College into a Faculty of the constituent University.</p>	<p><u>Graduate Programs:</u> Introduction of new programs in several areas of specialization at the Master's level.</p>
ACADEMIC SERVICES		<p><u>COUNCIL FOR INSTRUCTIONAL MEDIA</u> Establishment of an Instructional Media Centre.</p> <p><u>COMPUTER COUNCIL</u> Extensive expansion of the Computer Centre for teaching and research.</p>	

AGENDA ITEM -

3. Future Planning

- (d) *Outline of programs and/or courses to be dropped or reorganized in 1971-72 and 1972-73.*

It is not anticipated that for the two-year period in question (1971-72, 1972-73) the University will discontinue completely the offering of any academic degree program. Nevertheless, as stated earlier (Item 3. (c)), the various programs and individual course offerings are undergoing review and change constantly. In this more limited sense then, programs and courses will be "dropped" in the process of revision and reorganization.

Projections of programs and courses to be dropped in the coming years can be made only on grounds even more uncertain than those upon which the projections of new courses were based, because of the close association of the former with the latter. For example in this current year (1970-71), 41 individual courses have been eliminated, although only two years ago no accurate details of these changes could have been projected.

Given below is a brief outline of the courses and programs, recognized at this time, which will be dropped or reorganized in 1971-72.

Individual Course Offerings to be Dropped in 1971-72

- French 21. A Practical Language Course
- French 24. French Literature
- Russian 10. Intermediate Russian
- Secretarial Science 47. Office Practice

Programs to be Dropped or Reorganized 1971-72

Faculty of Arts

Russian Studies: Reorganization of the Honours Program by increasing the number of courses available from 10 to 16 and reducing the number of "required" courses (but not the total number) and permitting elected options.

Faculty of Science

1. Biology: Coincident with the introduction of a Three-year B.Sc. Degree in Biology, the present General B.A. Programs, Botany Major and Zoology Major, will be dropped. In addition the present Honours Programs in Bacteriology, Biochemistry, Biology, Biophysics, Physiology and Zoology will undergo reorganization to be consistent with the development of the new Three-year Degree program.

2. Physics: Dropping of the present Four-year Honours Major-Minor Program and reorganization of the remaining Three-year B.Sc. Program and the Honour Physics Program around a core-physics content with wider latitude of options in further Physics courses.

Faculty of Social Science

History: Reorganization of present General B.A. Program and Honours Program around a common stream of courses with development of a required core-content in each program.

Faculty of Medicine

Medicine: The undergraduate medical program may be reorganized with the introduction of core curriculum, some systems courses, and more elective time which will permit "streaming" if desired.

AGENDA ITEM -

3. Future Planning

- (e) *University views on effects on future planning of :*
 - (i) *Capital formula standards as now applied.*

1. Introduction

The University of Western Ontario approves wholeheartedly of the use of a Capital Grants Formula which, when perfected, will in our opinion provide a most equitable way of distributing Capital Funds across the Province, since it permits cumulative space planning on a five-year basis. The lack of a mechanism for the latter, before the formula was introduced, was a major reason inhibiting rational expansion plans. We have, however, a number of comments upon, and suggestions for improving, the Interim Capital Formula as it exists at present.

2. A Quantitative Base for the Scale of Weights

The present scale of weights is not perfect and should be revised. First, it would appear that the scale was originally developed in essentially a pragmatic way to fit existing circumstances. The implications of the formula are too important to be disposed of in this manner. Second, there are obvious anomalies which are apparent, even on the basis of qualitative observation, and these are discussed in para. 3 below and the Appendix.

The basic requirement for improving the scale of weights is the development of norms for space by function (e.g. class rooms, recreational space, laboratories, office space, etc.) for all those University functions which can be reasonably measured. There will still remain the necessity for the development of norms by academic discipline, as in the present weighting system. To illustrate, we would expect that the norms for faculty-space/student, support staff-space/student, and library-space/student, would need to take into account the differing needs of different disciplines.

Whether the final form of the space formula uses weights for particular functions, or weights for particular student categories, as at present, the quantitative analysis required will have to be based on the same functional

structure. We realize how complex the task is and are pleased to hear that an analysis of space by function is already in hand on a Provincial basis.

3. Interim Amendments to the Scale

We appreciate that some time must elapse before a new quantitatively based Capital Formula is developed and we suggest interim amendments to the present scale of weights, based on essentially subjective arguments. We feel that the present 5-point scale ranging from 1 to 4 is not adequate and should be changed to a 7-point scale ranging from 1 to 6. It is realized, however, that DUA would probably not wish to make such a drastic amendment with an entirely new formula in the offing. Accordingly, we outline in the Appendix and Tables XII and XIII our reasons for the desirability for changes in the scale, and a very tentative model of how such changes might be executed.

4. Weights for Summer School, Extension, and Part-time Students

It is essential that adequate weights for Summer School, Extension, and Part-time students be maintained in any modifications of the formula.

5. Renovation and Replacement

Adequate Capital Formula allowances must be maintained for renovation and replacement of obsolescent and obsolete buildings, in order that the integrity of the new space formula be maintained. Inadequate allowances will eventually lead to improper emphasis on growth in order to earn money for renovation by building new space at improperly cheap standards.

6. Cash Flow

The Interim Formula at the present time is handicapped by the fact that, although space planning is cumulative on a five-year basis, cash flow is not.

It is felt that cash flow commitment, cumulative on at least a three-year basis, would assist in more effective planning and resource allocations than is now possible. For example, if cash flow entitlements were guaranteed on a cumulative basis over three years it would not be necessary to alter individual project priorities to fit in with a fiscal requirement for one year only at the expense of the longer term planned program.

7. Building Costs

The dollars/ASF norm should be reviewed annually to allow for escalation of building costs. Recognizing that the Interim Capital Formula was originally devised on a pragmatic basis and that the present norm of \$55/ASF was chosen at the time of its initiation on the basis of data then current, it is certainly time that the norm was re-assessed. In conversation all persons connected with CPUO and CUA seem to support this view. We are puzzled as to why no action has yet been taken.

APPENDIX TO 3. (e)(i)
SUGGESTED INTERIM AMENDMENTS TO SCALE OF WEIGHTS

In the absence of a quantitatively-based set of norms we have proceeded in an essentially qualitative fashion to answer the following questions: -

1. Is the span of the present scale of weights satisfactory, and if not what change in the span is desirable, and what should the weights be inside the new span?
2. If it is essential that the span be retained at the present 1 - 4 range, what modifications should be made to it to remove present outstanding anomalies?

Our first conclusion was that the present span is not satisfactory and needed increasing at least to the range 1 - 6, in order to compensate for the variations in space requirements across the University, even when looked at from a qualitative viewpoint. The most significant factor in reaching this conclusion was our feeling that the ratio of weights for Ph.D. students between Experimental Science and Arts was far too low. Accordingly we began with a weight of 6.0 for Ph.D. students (other than 1st stage) in Science and Engineering as our maximum and rearranged weights below this. In the distribution the following cases were given special attention :-

1. Fine Art and Drama students beyond the 1st year of the undergraduate program should be given a much heavier weighting, comparable with that of Science students.
- 2.. General students in the Experimental Sciences should be weighted equivalent to Honours Experimental students rather than to General Arts students.
3. The space requirements of Mathematics, Applied Mathematics, Economics, Sociology and Political Science, although less than the requirements for the Experimental Sciences, Geography and Psychology, are greater than those of corresponding Arts students because of the increasingly heavy use of calculating devices including Desk Calculators, Remote Access Terminals, Keypunches, etc.
4. With a wider scale to work with, certain other adjustments were made in the interests of equity.

A tentative model for a new list of weights on the 1 - 6 basis is attached as Table XII. It must be emphasized that this should not be regarded as a firm recommendation from this University, since it has not received the approval of Senate or of the Faculties concerned. It serves, however, as an indication of trends in University thinking.

As stated in 3. (e)(i), it seems unlikely that such a radical change would be acceptable to DUA, in view of the new formula being developed, but a revised and locally approved version of it might be used for internal purposes at this University.

Table XIII shows a suggested amended list using the present 1 - 4 scale, but with suggestions to minimize the worst of the present anomalies. These again involve Fine Art and Drama, and the weight for General Science students.

TABLE XII
CAPITAL FORMULA WEIGHTS
Suggested amended list using Scale 1 - 6

	<u>Undergraduate</u>		<u>Graduate</u>
	<u>1st Year</u>	<u>Other</u>	<u>Full-Time</u>
<u>Faculty of Arts</u>			
General & Honours (other than Fine Art & Drama)	1.0	1.0	
General & Honours (Fine Art & Drama)		2.0	
M.A. & Ph.D. 1st stage (other than Fine Art & Drama)			1.5
M.A. (Fine Art & Drama)			3.5
Ph.D. other than 1st stage			2.0
<u>Faculty of Social Science</u>			
Journalism Diploma			1.5
P.H.E. & Gen. Home Economics	1.5	2.0	
Honours Psychology & Honours Geography		2.0	
Hons. Economics, Sociology, & Political Science		1.5	
General & Honours (other than Psychology, Geography, Economics, Sociology, & Political Science)	1.0	1.0	
M.A. & Ph.D. 1st stage (other than Psychology, Geography, Economics, Sociology, & Political Science)			1.5
Ph.D. other than 1st stage (other than Psychology, Geography, Economics, Sociology, & Political Science)			2.0
M.A. & Ph.D. 1st stage in Economics, Sociology, Political Science			2.0
Ph.D. other than 1st stage in Economics, Sociology, Political Science			3.0
M.A., M.Sc., Ph.D. 1st stage in Geography & Psychology			3.0
Ph.D. other than 1st stage in Geography & Psychology			4.5
<u>Faculty of Science</u>			
General (other than Applied Math. & Math.)	1.5	2.0	
Honours (other than Applied Math. & Math.)		2.0	
General and Honours (Applied Math. & Math.)	1.5	1.5	
M.A., M.Sc., & Ph.D. 1st stage in Applied Math. or Math.			2.0
M.Sc. & Ph.D. 1st stage (all other)			4.5
Ph.D. in Applied Math or Math.			3.0
Ph.D. (all other)			6.0
<u>Business</u>			
Honours		1.5	
M.B.A.			2.0
Ph.D.			3.0
<u>Music</u>			
General & Honours	1.5	2.0	
Master of Music and M.A., 1st stage Ph.D.			4.5
Ph.D. all others			3.0
<u>School of Library and Information Science</u>			
Qualifiers		1.0	
M.L.S.			2.0
<u>Engineering Science</u>			
Honours	1.5	2.0	
M.Eng., M.E.Sc., & Ph.D. 1st stage			4.5
Ph.D. other than 1st stage			6.0
<u>Law</u>			
		1.0	
<u>Education</u>			
Undergraduate	1.0	1.0	
Diploma			1.5
Master's degree			2.0

NOTE: Special students in Graduate Studies have same weights as M.A., M.Sc., Ph.D. 1st stage 1.5

TABLE XIII

CAPITAL FORMULA WEIGHTS
Suggested Amended List Using Scale 1 - 4

	<u>Undergraduate</u>		<u>Graduate</u>
	<u>1st Year</u>	<u>Other</u>	<u>Full-Time</u>
<u>Faculty of Arts</u>			
General & Honours (other than Fine Art & Drama)	1.0	1.0	
General & Honours (Fine Art & Drama)		1.5*	
M.A. & Ph.D. 1st stage (other than Fine Art & Drama)			1.5
M.A. (Fine Art & Drama)			2.0*
Ph.D. other than 1st stage			2.0
<u>Faculty of Social Science</u>			
Journalism Diploma			1.5
P.H.E. & Gen. Home Economics	1.5	1.5	
Honours Psychology & Geography		1.5	
General & Honours (all others)	1.0	1.0	
M.A. & Ph.D. 1st stage			1.5
Ph.D. other than 1st stage			2.0
M.A., M.Sc., & Ph.D. 1st stage in Geography & Psychology			3.0
Ph.D. other than 1st stage in Geography & Psychology			4.0
<u>Faculty of Science</u>			
General	1.5*	1.5*	
Honours		1.5	
M.A., M.Sc. & Ph.D. 1st stage in Applied Math. or Math.			1.5
M.Sc. & Ph.D. 1st stage (all other)			3.0
Ph.D. in Applied Math. or Math.			2.0
Ph.D. (all other)			4.0
<u>Business</u>			
Honours		1.0	
M.B.A. & Ph.D. 1st stage			1.5
Ph.D. other than 1st stage			2.0*
<u>Music</u>			
General and Honours	1.5	1.5	
Master of Music & M.A., Ph.D. 1st stage			3.0
Ph.D. all others			2.0
<u>School of Library & Information Science</u>			
Qualifiers		1.0	
M.L.S.			1.5
<u>Engineering</u>			
Honours	1.5	1.5	
M.Eng., M.E.Sc., & Ph.D. 1st stage			3.0
Ph.D. other than 1st stage			4.0
<u>Law</u>			
		1.0	

NOTE: Special students in Graduate Studies have same weights as M.A., M.Sc., Ph.D. 1st stage.

* Indicates changes from DUA list.

AGENDA ITEM -

3. Future Planning

(e) *University views on effects on future planning of :*

(ii) *Changing secondary school patterns. - Do attitudes differ among faculties of the University on this matter?*

The changes in curriculum and procedures that have been recently introduced in the Ontario Secondary Schools will certainly affect the programs and regulations of this University. At the present time, however, it is difficult to assess the full impact of these changes. The following developments in the Secondary Schools seem likely to affect the University in the near future:

- (a) The change to a credit system and the emphasis on an area of study permit students relatively free selection of courses with few constraints.
- (b) The new regulations allow evaluation in terms of pass/fail or satisfactory/unsatisfactory rather than as a percentage grade.
- (c) It is anticipated that a greater proportion of students will complete Grade 13 and that a greater proportion of Grade 13 graduates will be eligible to enter University.

Effects on this University

The selection of students for admission will be difficult because of the introduction of less structured programs and because of the different grading schemes that may be used in secondary schools. The problem will be compounded by the expected increase in the number of applicants. These factors may well lead to a greater reliance on standardized admission tests. A Senate committee is considering this problem.

It may become necessary to introduce additional "beginning courses" in certain disciplines. If a significant number of able secondary school graduates clearly eligible to enter University do not have the necessary preparation for the University programs of their choice, the demand for more such courses may prove irresistible.

AGENDA ITEM -

3. Future Planning

(e) *University views on effects on future planning of :*

(iii) *Enrolment intake from other than secondary schools.*

The freshmen intake from sources other than the Ontario Secondary Schools is shown in Table XIV. It can be noted that the number of freshmen in the Mature Applicant, CAATS, and other Ontario Universities categories increased in 1969-70 as compared to 1968-69. It is anticipated that this trend will continue for the 1970-71 academic year.

TABLE XIV

Source of Freshmen Intake in 1968-69 and 1969-70*
(Arts, Science, and Social Science - Constituent University)

	1968-69 %	1969-70 %
<u>Ontario</u>		
Secondary Schools	88.1	86.7
Mature Applicants	3.6	5.0
CAATS	0.7	1.0
Other Universities	0.7	1.9
Sub-Total	93.1	94.6
<u>Other Provinces</u>	3.2	2.4
<u>Outside Canada</u>	3.6	3.1

* In 1968-69 the freshmen intake was 2,565 and in 1969-70 it was 3,023.

AGENDA ITEM -

3. Future Planning

- (e) *University views on effects on future planning of :*
- (iv) *Changing student preference.*

Total Number of Students in each Faculty.

The percentage distribution of students among the three largest Faculties from 1967 to 1970 and the projected distribution to 1975 is shown in Table XV. The percentage of students in Social Science has increased from 48% in 1967 to 53% in 1970, and a further increase to 54% is projected by 1975. During the same time period there was a decrease in the percentage of students in Arts from 25% to 18% and a further decrease to 17% by 1975 is projected. The percentage of students in Science has remained relatively constant (27% - 29%) and no further change is anticipated for this Faculty up to 1975.

Freshmen.

The percentage of freshmen enrolled in the combined Faculties of Arts, Science, and Social Science as opposed to the professional schools has remained relatively constant. A comparison of the freshmen enrolment among the Faculties of Arts, Science, and Social Science is not very meaningful at this University because specialization begins only in the second year of study.

General and Honours Programs

A comparison of enrolment in the General as opposed to the Honours Programs in the three Faculties combined from 1967 to 1970 is shown in Table XVI. It can be seen that the percentage of students in the General vs. Honours Programs has remained relatively constant. Seventeen percent of the General Program students have registered in the new General Program, introduced in 1970, which allows greater freedom in the selection of courses.

The distribution of students in the General and Honours Programs among the three Faculties from 1967 to 1970 is shown in Table XVII.

It was noted above (Table XV) that the percentage of all students in Arts has decreased. It can be seen in Table XVII that this decrease is due to a decreased enrolment in the General Program, while the percentage enrolment in Honours Programs has actually increased. In Science there has been a steady

increase in the percentage of students enrolled in the General Program. In 1970 there was a decrease in the percentage of students in the Honours Program, coincident with the introduction of the three-year B.Sc. with a designated area of concentration.

TABLE XV

Percentage Distribution of Undergraduate Students* in the
Faculties of Arts, Science, and Social Science, 1967 - 1970.

	<u>1967-68</u>	<u>1968-69</u>	<u>1969-70</u>	<u>1970-71</u>	<u>... 1975-76</u>
Arts	24.7	21.5	19.6	17.8	17.0
Science	27.6	27.5	28.1	29.1	29.0
Social Science	47.7	51.0	52.3	53.1	54.0
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	100.0	100.0	100.0	100.0	100.0

*Make-up and Pre-requisite students not included.

TABLE XVI

Percentage Distribution of Upper Year Students* Enrolled in the General vs. Honours Programs for the Faculties of Arts, Science, and Social Science Combined, 1967 - 1970.

<u>1967-68</u>		<u>1968-69</u>		<u>1969-70</u>		<u>1970-71</u>	
General	Honours	General	Honours	General	Honours	General	Honours
63.5	36.5	64.2	35.8	62.8	37.2	64.5	35.5

* Make-up and Pre-requisite students excluded.

TABLE XVII

Percentage Distribution of Upper Year Students* in the General
and Honours Programs for the Faculties of Arts, Science, and
Social Science, 1967 - 1970.

	<u>1967-68</u>		<u>1968-69</u>		<u>1969-70</u>		<u>1970-71</u>	
	General	Honours	General	Honours	General	Honours	General	Honours
Arts	26.4	19.7	24.6	19.4	22.2	20.2	16.2	24.1
Science	20.4	36.3	21.7	35.8	22.7	37.5	25.2	30.4
Social Science	53.2	44.0	53.7	44.8	55.1	42.3	58.6	45.5
	100.00	100.0	100.0	100.0	100.0	100.0	100.0	100.0

*Make-up and Pre-requisite students excluded.

AGENDA ITEM -

3. Future Planning

(e) *University views on effects on future planning of :*

(v) *Changing patterns of job opportunities.*

The steady increase in the number of make-up and prerequisite year students (Tables V and VI), that is students who engage upon a year of study after the B.A., is probably the result of the recent decrease in job opportunities and the failure of many students to gain admission to a College of Education. An increasing number of students now wish to upgrade their qualifications before leaving University. It appears, therefore, that if economic conditions do not improve, the proportion of the population seeking admission to University at all levels will continue to increase.

AGENDA ITEM -

3. Future Planning

- (f) *University comments on possible effects of increasing demand of student assistance from the limited total resources available for the support of higher education.*
- (i) *How can the relative priorities be decided?*

The major input for this item consisted of the report of a Presidential committee set up to (1) examine the facts of the existing OSAP Program, (2) consider the Cook-Stager and similar loan-based schemes, (3) suggest areas for further investigation, and a submission from the University Students' Council. Although these two reports differed only in emphasis, it was felt that the Students' Council report should be included in this submission in its entirety and it is, therefore, included as an Appendix.

The Government of Ontario has taken the position that government policy is to make places available in its post-secondary institutions for all eligible students, and the stated objective of OSAP is that no qualified student in Ontario be denied post-secondary education because of a lack of financial resources. These two statements make a firm statement on priorities and this position is one which the University community wholeheartedly endorses.

AGENDA ITEM -

3. Future Planning

- (f) *University comments on possible effects of increasing demand of student assistance from the limited total resources available for the support of higher education.*
- (ii) *Are current patterns of private vs public sources of support for higher education appropriate?*

It is the general feeling that the current structure of support for students, while perhaps not perfect, is a sound plan. The Ontario Student Awards Program is by far the best in Canada and it has brought forth sincere praise from educationalists in the United States. The cost of the program annually has been well below the cost of the free tuition program which was so popular only five years ago and it does far more for the needy student. Also, the effectiveness of the administration of OSAP has improved each year to the point where administrative problems and complaints are now minimal.

If the cost projections for OSAP, along with other projections in the cost of higher education, are causing concern, and changes must be made, the following changes in OSAP could reduce the costs considerably:

1. Eliminate the grant portion of OSAP for repeaters.
2. Increase the loan maximum in the student-aid package gradually to \$1,000.00. At present the 60/40 ratio of loan/grant in the student-aid package is waived when the loan portion reaches the present \$600.00 maximum and then the balance becomes a grant.
3. Adjust the loan/grant ratio to 65/35 or 70/30 in the third and subsequent years.
4. Consider changes in the admission standards of Ontario Universities and other post-secondary institutions receiving public funds.

But while the present program is working well, there are some issues that warrant special consideration. These are :

(a) Stability of the Program

In any student financial aid program it is essential that educators and students at all levels be familiar with its objectives and how it works. Radical changes every few years can only lead to confusion. Although the present program has existed for four years during which it has followed a relatively stable pattern, there still remains in the minds of parents, counsellors and the general public, misconceptions

as to the intent and content of the Ontario Student Awards Program. Therefore, until such time as a better program can be devised, only minor changes should be made in the present one.

(b) The parent contribution limits established three to four years ago needs to be updated to reflect rising living costs. In our opinion special consideration should be given to the middle income group of \$7,500. to \$10,000.

(c) Scholarships

Many of OSAP's critics are concerned that the program does not reward academic excellence. OSAP, under its present regulations, allows for an outside award to a maximum of \$150. at which point scholarship money in excess of this amount is deducted from the student's grant portion of his award. It is recommended that this limit be raised to \$250.

APPENDIX TO 3. (f) (i) and (ii)

(Larry Steinman, President, University Students' Council.)

Introduction:

Current government policy regarding student financial assistance for the support of higher education is explicit. It has been stated many times that the "government policy is to make places available in the post-secondary institutions for all eligible students" The DUA also states, in its publications, that "The Ontario Student Awards Program is intended to provide opportunities for students of this Province who lack adequate financial resources".

As outlined by the Cook, Clark, Fallis and Kent Report (CCFK Report), there are at least three major criteria by which to judge the effectiveness of a financial assistance scheme.

1. The extent to which it enables needy students to obtain the necessary funds to continue their education.
2. The extent to which it makes participation in the educational system of equal ease to everyone (equity).
3. The extent to which it reaches and benefits the basic educational decision-making process of the needy student - i.e. equalizes opportunity.¹

The CCFK Report also illustrates that less than 20% of those from urban class families, earning less than \$5,000. enter a University, while nearly 50% of those from the same category, earning over \$10,000. attain this level of education.² Obviously, there are variables beyond the effects of a financial assistance program which have a bearing upon a child's performance in the educational system. Closely related to a family's economic difficulties is the cultural and intellectual deprivation sometimes experienced by the child. This problem leads to many difficulties during the child's initial years in the school system, and often a lack of motivation to continue in the system results. This child's whole experience in the educational system is also often antagonistic to his experiences at home. The middle-class values and rules taught in schools are generally in opposition to the child's experiences in his home environment. The income barrier, therefore, has its effects early in the career of the child and is directly related to his inability to perform.

The CCFK Report also brought to light the very interesting observation that very few students, beyond the grade ten level, had even heard of OSAP.

Recent surveys have also shown that most students decide, at about the grade nine level, what their future program in the educational system shall be. Many decisions are based upon financial considerations. Most students attempt to ascertain what the economic advantages would be in relation to the future costs of education and the amount of foregone earnings during that period. A student from a low income family will have these economic considerations in the front of his mind. His entire life has, to that point, been a series of crises, each having a direct relationship to the absence of money. His home environment and, to some extent,

1. CCFK Report p. 98

2. CCFK Report, p. 78

his school environment were both a result of financial problems from which he undoubtedly wishes to escape. Part of his considerations of whether to attend a post-secondary educational institution involve the financial questions which must be resolved before proceeding further in the system. At the grade nine level, 35% of the students sampled overestimated the costs of post-secondary education.³

Perhaps one of the main problems of the existing plan, therefore, is that the program is not communicated well enough at the early levels of the educational system. Should a student from the low income group become aware of an assistance program in his early school career, this would have a strong effect upon his performance in the system. A child in primary school may well regard his future activities in the system in a different light if he is informed of the resources available to him to continue beyond the secondary level. This information may well motivate a goodly number to abandon their plans to enter a vocational school in lieu of a program at the post-secondary level.

An assistance program should not only provide funds to enable those, who wish to attend, an opportunity to enrol, but should also serve as a force to stimulate students to continue in the system rather than enter a dead end course.

3. (f)(i) How may priorities be decided?

In a paper presented to the Committee on Post-Secondary Education of the Council of Ministers of Education, the Ontario Department of University Affairs estimated that the grant portion of the Province of Ontario Student Awards Program (POSAP) would increase from 31.5 million dollars in 1969-70, to 104.0 million in 1980-81, to 195.0 million in 1989-90. To a government increasingly concerned with the growing size of its budget, such a dramatic rise in the cost of a program is bound to be a worry. It should be remembered, however, that there are few areas in which government money could be better spent.

"The cost of a pure grant scheme would be significant, effectively doubling the present expenditure. However, this would still only represent about 2% of the Provincial budget in 1967-68, hardly a significant commitment to helping ensure equality of access to our most crucial state resource. If the Ontario Government continues to make up the same proportion of the Gross Provincial Product and the economy grew in money terms at the rate of 7% per year, a growth rate, which Ontario has dropped below only once since 1961, a full grant aid scheme would represent only 3.7% of the Provincial budget in 1980-81 and 3.9% of the budget in 1989 - 90. This would mean a three-fold increase of the present OSAP commitment, spread over a span of twenty-three years. The absolute costs of such an aid scheme do, at first, seem large, but when seen in proper perspective of Provincial growth, they are not dramatic. Furthermore, this analysis may even overstate the cost for it is based on the assumption that the Provincial Government does not increase its sector of Gross Provincial Product."⁴

It may be appropriate, in light of the government's stated dedication to offer post-secondary education to all qualified students, to examine the possibility

3. CCFK Report, p. 102

4. Marino, Mike. "A Working Paper on Student Aid SAC: U. of Toronto, July 1970"

of a purely grant-based scheme as a means of ensuring that students, particularly those in the lower income groups, are not deterred from seeking post-secondary education by the prospects of a large debt being incurred in a loan/grant based scheme.

Within the system, priority must obviously be given to those in the lower income groups, who would probably otherwise lack sufficient funds to continue in the education system. This group probably includes those in the \$7,000. - \$8,000. range, since it has been illustrated by recent surveys that few parents aid their children from savings - most rely upon current wages for support. Obviously a married student with children and an unemployed spouse will require more assistance than a single student.

Student financial assistance, therefore, in order to be consistent with the government's apparent dedication to provide a post-secondary education for all qualified students, must be given a high priority, so that the financial considerations for those contemplating higher education will be minimized.

3. (f)(ii) Are the current patterns of private vs public sources of support for higher education appropriate?

The discussion concerning this item is based upon the assumption that the question is relating to the financing of the overall post-secondary system and not the private vs public resources within the financial assistance scheme. Currently, government funds account for somewhere in the vicinity of 80% of the cost of educating a student in a post-secondary institution - the student pays the remainder.

The basic question being raised in this item is whether governments should be responsible for maintaining this rather high percentage of support, in light of spiralling costs of operating post-secondary institutions and in view of the increasing demands from other areas for government funds.

Immediately following World War II, some economists were of the opinion that education should be viewed by governments as an investment and should, therefore, receive large portions of government expenditures. As late as 1963, Harold M. Groves wrote:

"Economists are discovering that growth may be mainly a matter of developing human talent and that it can be deliberately fostered by judicious, but generous, allocation of resources for this purpose ... From being a fairly respectable member of the family of items called consumption goods, on which the nation spends its income, education is elevated in the eyes of many economists to the even more respectable capital-goods category on which the nation's future depends. All this is superimposed upon some continuing concern that we not only grow quantitatively, but improve the utilization of our resources qualitatively."

As both the Cook-Stager and the Clark, Cook, Fallas, Kent Reports attempt to point out, the basic question which faces government now is to determine who benefits the most from post-secondary education - the individual, or the greater society. Although there definitely was a time when a university

education offered the graduate a high-wage position as a captain of industry, this condition is rapidly changing and graduates of post-secondary institutions are finding it increasingly difficult to obtain the high paying jobs for which they originally sought their degrees. Universities are faced with the new reality that their graduates, particularly the sciences and engineering, are facing real problems when searching for jobs. With the increased enrolment in the social sciences and many of the professional schools, one might expect that this problem will soon be felt in those faculties. The financial benefits, therefore, which will be received by the graduate of a post-secondary institution are becoming less than they were even five years previous.

Societal benefits derived from a better educated citizenry must not be underestimated. The increased awareness of the problems and inadequacies of our nation, to be derived from higher education, can do nothing but aid a democratic society. A democracy cannot work unless there is an informed citizenry who are able to make a valuable contribution in the workings of their government. Reports also reach the press that there are direct relationships between the absence of crime and the absence of violence, with higher education. The benefits accruing to society from higher education, although not totally economic, are obvious and must not be underestimated.

Higher education should be viewed by governments as an investment rather than as an item of consumption. Public funds must be made available to ensure that the expansion of post-secondary institutions will not be endangered. The current patterns of financing are based upon the assumption that the graduate benefits to the extent of approximately 20%. In light of recent graduate unemployment and the decreasing value of the general degree, it may be advisable that governments re-examine this percentage since it is becoming increasingly evident that the graduate is not receiving the direct benefits he may have, even five years previous. Rather than increasing the proportion of funds provided by private sources, it is advisable that governments examine the possibilities of adjusting the distribution so that public funds are increased in line with the increasing proportion of benefits accruing to the general population, rather than the individual.

Recommendations:

1. That the opportunity bank concept, as exemplified in the Cook-Stager Report, be considered to be an undesirable approach to the problems of both graduate and undergraduate student support.
2. That the government sponsor a sophisticated and quantitatively precise cost-benefit analysis of higher education with the view of initiating a modified student financial assistance scheme to image the conclusions of that analysis.
3. That the current POSAP scheme be maintained subject to examination of the results of an exhaustive cost-benefit analysis.
4. That the current POSAP scheme be advertised more extensively to both the students at the upper primary school level and to their parents.

AGENDA ITEM -

3. Future Planning

(g) *Student Housing.*

- (i) *What will be the University's requirements in student housing during the next five years?*

The required information is given in Tables XVIII, XIX, XX, and XXI.

TABLE XVIII

PROJECTED NEED FOR RESIDENCE PLACES TO 1975-76

	<u>69-70</u>	<u>70-71</u>	<u>71-72</u>	<u>72-73</u>	<u>73-74</u>	<u>74-75</u>	<u>75-76</u>
*Total full-time enrolment	10,702	12,255	13,540	14,502	15,390	16,187	16,876
**Available residence places	3,190	3,190	3,190	3,190	3,190	3,190	3,190
Percent available places are of full-time enrolment	29.81	26.03	23.56	21.97	20.73	19.71	18.90
Total places needed to maintain present percentage of full-time enrolment in residences (29.81%)	3,190	3,653	4,036	4,323	4,588	4,825	5,031
Additional places needed to maintain present percentage of full-time enrolment in residences (29.81%)	0	463	846	1,133	1,398	1,635	1,841

* Excludes non-resident, affiliated colleges and interns.

** Includes co-operatives and fraternities and assumes no new construction in forecast period.

TABLE XIX

PROJECTED NEED FOR MARRIED STUDENT HOUSING TO 1975-76

	<u>69-70</u>	<u>70-71</u>	<u>71-72</u>	<u>72-73</u>	<u>73-74</u>	<u>74-75</u>	<u>75-76</u>
(A) *Total full-time enrolment	10,702	12,255	13,540	14,502	15,390	16,187	16,876
(B) Total married students (10% of A)	1,070	1,226	1,354	1,450	1,539	1,618	1,687
Housing units required to provide accommodation for 30% of B	321	368	405	435	462	485	506
**Married housing units available for B	399	399	399	399	399	399	399
Additional married housing units needed to provide accommodation for 30% of B	-78	-31	6	36	63	86	107
Percentage of B for whom housing is available.	37.29	32.54	29.56	27.52	25.93	24.66	23.65

* Excludes non-resident, affiliated colleges and interns.

** Includes co-operatives and fraternities and assumes no new construction in forecast period.

TABLE XX

PROJECTED NEED FOR HOUSING FOR MEN STUDENTS TO 1975-76

	<u>69-70</u>	<u>70-71</u>	<u>71-72</u>	<u>72-73</u>	<u>73-74</u>	<u>74-75</u>	<u>75-76</u>
(C) *Total full-time men students (65% of A - Table XIX)	6,956	7,966	8,801	9,426	10,004	10,522	10,969
(D) 90% of married students (B - Table XIX)	963	1,103	1,215	1,305	1,385	1,456	1,518
(E) Total single men students (C - D)	5,993	6,863	7,586	8,121	8,619	9,066	9,451
**Places available for single men (E)	1,744	1,744	1,744	1,744	1,744	1,744	1,744
Total places needed to maintain present percentage of single men (E) in residences (29.10%)	1,744	1,997	2,208	2,363	2,508	2,638	2,750
New places needed to maintain present percentage of single men (E) in residences (29.10%)	0	253	464	619	764	894	1,006

* Excludes non-residents, affiliated colleges and interns.

** Includes co-operatives and fraternities and assumes no new construction in forecast period.

TABLE XXI

PROJECTED NEED FOR HOUSING FOR WOMEN STUDENTS TO 1975-76

	<u>69-70</u>	<u>70-71</u>	<u>71-72</u>	<u>72-73</u>	<u>73-74</u>	<u>74-75</u>	<u>75-76</u>
(F) *Total full-time women students (35% of A - Table XIX)	3,746	4,289	4,739	5,076	5,387	5,665	5,907
(G) 10% of married students (B - Table XIX)	107	123	135	145	154	162	169
(H) Total single women students (F -G)	3,639	4,166	4,604	4,931	5,233	5,503	5,738
**Places available for single women (H)	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Total places needed to maintain present percentage of single women (H) in residences (28.77%)	1,047	1,199	1,325	1,419	1,506	1,583	1,651
New places needed to maintain present percentage of single women (H) in residences (28.77%)	0	152	278	372	459	536	604

* Excludes non-residents, affiliated colleges and interns.

** Includes co-operatives and fraternities and assumes no new construction in forecast period.

AGENDA ITEM -

3. Future Planning

(g) *Student Housing.*

(ii) *How has this need been determined?*

In the next few months the University Joint Housing Committee plans to develop a housing model to be used in forecasting as precisely as possible the need for University-endorsed residence places. The University has taken the view that residences are not simply dormitories, but that they are an integral part of the total academic environment. Consistent with this view an important component of the model will, therefore, be a factor which represents a considered judgement of the minimum number of residence places needed to ensure a desirable academic-residence community. The model will also require an accurate forecast of the proportion of full-time students living beyond a reasonable commuting distance from the campus and the number of acceptable off-campus housing places available to students in London. It will also be necessary to consider in the model the proportion of single women in the full-time student enrolment. Past experience has shown that this group has a greater requirement for University-sponsored housing.

Although there is still some evidence of unused private accommodation in London, student preference for residence accommodation remains strong. Many more applications are received each year than there are residence places. Until a predictive housing model can be developed, the number of new residence places which will be required to maintain the present level of residence accommodation is given in Tables XVIII, XIX, XX, and XXI.

In Tables XVIII, XIX, XX, and XXI the figure for total full-time enrolment does not include full-time students registered in the Affiliated Colleges and the medical interns. It has been assumed that the present mix of men and women students will remain constant during the forecast period. At present approximately 65% of the student body is composed of men and 35% of women. During the past few years the percentage of women students is increasing.

Students whose homes are beyond commuting distance of the campus compose approximately 76% of the full-time student body. It has been assumed that this percentage will not increase substantially during the forecast period. although

there was an unexpected 3% increase in this figure last year. The percentage may continue to rise gradually during the forecast period.

The distribution of total number of University-endorsed residence places is indicated below. It will be noted that the total of 3190 residence places includes places available in sororities, fraternities and co-operative housing establishments.

University and Other Residence Accommodation 1970-71

Table XIX indicates that if no new housing is constructed for married students the percentage of married students for whom University accommodation is available will have dropped from 37.29% in 1969-70 to 23.65% in 1975-76. Needed residence units for married students in order to provide for 30% of the group are indicated. The negative quantities which appear for 1969-70 and 1970-71 indicate that it is possible at present to accommodate somewhat more than 30% of the married students in university housing. The negative values do not indicate that there is unused residence accommodation. By 1975-76 107 new units will be required.

Tables XX and XXI indicate the required residence places for men and women students, respectively, in order to maintain the present percentages of full-time single men (29.10%) and single women (28.77%) housed in University or University-sponsored residences.

AGENDA ITEM -

3. Future Planning

(g) *Student Housing*

- (iii) *What will be the effects on the University's development if funds are not available to permit housing projects of the indicated scale?*

It is extremely difficult to forecast the effect on University development if funds are not available to permit construction of additional residence places by 1975-76. The difficulties may be summarized as follows:

1. It is not known with what rapidity housing co-operatives will be developed and the degree to which students will accept such accommodation if it is available. It is possible that a university supported co-operative student housing scheme presently in the discussion stage could meet all university housing needs to 1975-76.
2. As suggested earlier, there is considerable uncertainty as to the desirable (ideal) percentage of the total student body which should live in university residences. Figures usually quoted are based on a variety of assumptions. The effect on University development of a higher or lower percentage of students in residence is at present difficult to estimate.
3. Student housing preferences are changing. At the present time a preference is developing for "small group living with emphasis on privacy, convenience, variety and independence". Relatively low cost university-sponsored co-operative housing which provides these amenities may be the answer.

The effects on University development if funds are not available to permit residence development could include the following:

1. Students planning to enrol at Western might decide to attend another Ontario University where on-campus housing is available. Particular attention will need to be given to the needs of graduate students who require accommodation on a year-round basis rather than just for the academic year, and who must often support families on limited budgets. Though such students will probably not be discouraged from attending Western because of unsatisfactory accommodation, their special needs must be carefully considered.
2. Students who are unable to obtain on-campus housing must turn to accommodation available in the community. Students may find themselves forced to take less desirable accommodation at a greater distance from the campus. A poor study environment for an increasing percentage of the University student body could have a serious effect on the overall academic performance of the University.

3. Lack of funds for residence construction might result in increased expenditure in other areas of University operation. It might, for example, be necessary to increase expenditure for parking and traffic facilities to accommodate the greater traffic flow resulting from increased commuting to the campus. It is also possible that increased expenditure would be required to provide subsidized bus service to the campus.

In view of the above discussion it is felt to be prudent to maintain the University residence accommodation at the present level in the immediate future.

AGENDA ITEM -

4. Other Matters

(a) *Mission Oriented Research.*

Outline of the University's involvement in this area of activity.

A request to outline the University's involvement in "mission-oriented" research obviously requires a definition of "mission-oriented". After some consideration of possible definitions, we have taken the view that mission-oriented research is research that is supported by grants from the following sources: The Defence Research Board; the Federal Departments of External Affairs, Transport, and Energy, Mines & Resources, and the Provincial Departments of Tourism & Information, and Treasury & Economics. The opposite of "mission-oriented" research could be considered to be "curiosity-motivated" research. We have defined "curiosity-motivated" research as research supported at the University of Western Ontario by the following sources: The Canada Council; the National Research Council; the Federal Department of Health & Welfare; the Provincial Departments of Health and University Affairs; the United States Government; and corporations, foundations, associations, institutions and societies.

Grants from the Medical Research Council have been included as "mission-oriented" in one calculation in the table below, and as "curiosity-motivated" in the other.

We recognize the arbitrary nature of our distinction between "mission-oriented" and "curiosity-motivated" research. We think that anyone who has done research would agree that research is rarely one or the other, but is usually part mission-oriented and part curiosity-motivated. Any distinction of this sort will have to be arbitrary, and since no other distinction has been provided for us, we have provided our own. We would not wish to defend it.

Tables XXII, XXIII, and XXIV show all research funds received by the University in the years 1967-68, 1968-69 and 1969-70. From these figures we have extracted the following dollar values for the grants received for mission-oriented and curiosity-motivated research during those years.

It is of some interest that both the total dollar amounts spent on mission-oriented research, as well as the percentage of research which is mission-oriented, have been rising over the past four years. Dollar amounts received from the Defence Research Board have, however, been nearly constant during this period.

Research Expenditures (in thousands of dollars)*

	<u>67-68</u>	<u>68-69</u>	<u>69-70</u>
1. <u>Mission-oriented</u>			
Federal Government:			
Defence Research Board	131	128	134
Energy, Mines & Resources	2	37	35
External Affairs	0	16	196
Transport	3	68	70
Provincial Government:			
Tourism & Information	258	287	331
Treasury & Economics	<u>73</u>	<u>73</u>	<u>48</u>
Sub-Total 1	<u>467</u>	<u>609</u>	<u>814</u>
Percentage of Total	8.7	10.3	12.8
Medical Research Council	<u>1189</u>	<u>1243</u>	<u>1301</u>
Sub-Total 2	<u>1656</u>	<u>1852</u>	<u>2115</u>
Percentage of Total	31.0	31.3	33.2
2. <u>Curiosity-motivated</u>			
Sub-total 1	4879	5302	5553
Sub-total 2	<u>3690</u>	<u>4059</u>	<u>4252</u>
TOTAL	<u>5346</u>	<u>5911</u>	<u>6367</u>

* Sub-totals 1 and 2 are included with M.R.C. Grants defined as "curiosity-motivated" and "mission-oriented", respectively.

THE UNIVERSITY OF WESTERN ONTARIO
SCHEDULE OF RESEARCH FUND INCOME AND EXPENDITURES
FOR THE YEAR ENDING JUNE 30, 1968

Table XXII

SOURCE OF FUNDS	FACULTY OF MEDICINE	FACULTY OF ARTS & SOCIAL SCIENCES	FACULTY OF SCIENCE	SCHOOL OF BUSINESS ADMINISTRATION	SCHOOL OF NURSING	FACULTY OF DENTISTRY	MUSEUMS	FACULTY OF ENGINEERING SCIENCE	ALTHOUSE COLLEGE	GENERAL	TOTAL
GOVERNMENT - FEDERAL											
Canada Council	\$ 46,25-	\$ 87,627.74	0	0	0	0	0	0	0	0	\$ 87,581.49
Defence Research Board	\$ 56,857.14	\$ 1,294.03	\$ 73,234.29	0	0	0	0	0	0	0	\$ 131,385.46
Energy, Mines & Resources	0	\$ 259.98	\$ 147.81	0	0	0	0	\$ 1,335.55	0	0	\$ 1,743.34
External Affairs	0	0	0	0	0	0	0	0	0	0	0
Medical Research Council	\$1,184,366.04	\$ 1,280.79	\$ 15.70	0	0	0	0	\$ 2,950.99	0	0	\$1,188,613.52
National Research Council	\$ 57,608.88	\$ 54,982.19	\$1,407,261.19	0	0	\$3,244.00	0	\$143,325.79	0	\$52,858.98	\$1,719,281.03
National Health & Welfare	\$ 221,034.71	\$ 18,040.62	0	0	0	0	0	0	0	0	\$ 239,075.33
Transport	0	0	0	0	0	0	0	\$ 2,916.00	0	0	\$ 2,916.00
Other	0	\$ 9,829.14	\$ 94,911.25	0	0	0	0	\$ 10,063.45	0	0	\$ 114,803.84
	\$1,519,820.52	\$173,314.49	\$1,575,570.24	0	0	\$3,244.00	0	\$160,591.78	0	\$52,858.98	\$3,485,400.01
GOVERNMENT - PROVINCIAL											
Health	0	0	0	0	\$2,579.20	\$ 504.64	0	\$ 93,990.80	0	0	\$ 97,074.64
Tourism & Information	0	\$ 648.06	0	0	0	0	\$257,665.04	0	0	0	\$ 258,313.10
Treasury & Economics	0	\$ 72,588.17	0	0	0	0	0	0	0	0	\$ 72,588.17
University Affairs	0	\$ 253.22	\$ 27,199.28	0	0	0	0	\$ 150.09	0	0	\$ 27,602.59
Other	0	\$ 7,553.83	\$ 5,719.94	0	0	0	0	\$ 200.00	0	\$ 1,200.00	\$ 14,673.77
	0	\$ 81,043.28	\$ 32,919.22	0	\$2,579.20	\$ 504.64	\$257,665.04	\$ 94,340.89	0	\$ 1,200.00	\$ 470,252.27
GOVERNMENT - UNITED STATES	0	\$ 12,663.60	\$ 65,787.28	0	0	0	0	0	0	0	\$ 78,450.88
CORPORATIONS	\$ 40,171.49	\$ 9,049.16	\$ 21,594.06	\$ 23,345.96	0	0	0	\$ 72,206.31	0	\$ 489.08	\$ 166,856.06
FOUNDATIONS, ASSOCIATIONS, INSTITUTES & SOCIETIES											
Ontario Heart Foundation	\$ 171,692.90	0	0	0	0	0	0	0	0	0	\$ 171,692.90
Ontario Mental Health	\$ 30,095.12	\$104,088.49	0	0	0	0	0	0	0	0	\$ 134,183.61
National Cancer Institute	\$ 325,531.36	0	\$ 7,533.96	0	0	0	0	0	0	0	\$ 333,065.32
Other	\$ 91,527.88	\$ 10,600.99	\$ 17,466.95	\$139,469.60	0	0	0	\$ 10,669.26	0	\$ 1,159.44	\$ 270,894.12
	\$ 618,847.26	\$114,689.48	\$ 25,000.91	\$139,469.60	0	0	0	\$ 10,669.26	0	\$ 1,159.44	\$ 909,835.95
INDIVIDUALS & BEQUESTS	0	0	0	0	0	0	0	\$ 25.02	0	0	\$ 25.02
ENDOWMENTS	\$ 9,245.31	\$ 273.94	0	0	0	0	0	\$ 226.16	0	0	\$ 9,745.41
UNIVERSITY	\$ 1,419.43	\$ 60,913.18	\$ 14,424.67	0	0	0	0	\$ 14,651.78	\$7,274.56	0	\$ 98,683.62
OTHER	\$ 78,098.68	\$ 12,045.75	\$ 36,193.04	0	0	0	0	0	0	\$ 24.94	\$ 126,362.41
	\$2,267,602.69	\$463,992.88	\$1,771,489.42	\$162,815.56	\$2,579.20	\$3,748.64	\$257,665.04	\$352,711.20	\$7,274.56	\$55,732.44	\$5,345,611.63

THE UNIVERSITY OF WESTERN ONTARIO
SCHEDULE OF RESEARCH EXPENDITURES BY SOURCE OF FUNDS
FOR THE YEAR ENDED JUNE 30, 1969

SOURCE OF FUNDS	FACULTY OF MEDICINE	FACULTY OF ARTS & SCIENCE	SCHOOL OF BUSINESS ADMINISTRATION	SCHOOL OF NURSING	FACULTY OF LAW	FACULTY OF DENTISTRY	MUSEUMS	FACULTY OF ENGINEERING SCIENCE	ALTHOUSE COLLEGE	GENERAL	TOTAL
GOVERNMENT - FEDERAL											
Canada Council	\$ 342.87	\$ 51,934.25	0	0	\$2,022.76	0	0	\$ 912.76	0	0	\$ 55,212.64
Defence Research Board	\$ 46,541.87	\$ 82,309.87	0	0	0	0	0	0	0	0	\$ 128,851.74
Energy, Mines & Resources	0	\$ 24,887.39	0	0	0	0	0	\$ 12,227.34	0	0	\$ 37,114.73
External Affairs	0	0	0	0	0	0	0	\$ 15,912.18	0	0	\$ 15,912.18
Medical Research Council	\$1,218,897.13	\$ 16,411.82	0	0	0	\$ 4,305.82	0	\$ 3,732.41	0	0	\$1,243,347.18
National Research Council	\$ 35,412.40	\$1,380,383.43	0	0	0	\$ 4,833.02	0	\$222,194.83	0	\$84,191.62	\$1,727,015.30
National Health & Welfare	\$ 169,997.67	\$ 15,003.98	0	0	0	\$ 4,287.75	0	\$ 5,951.34	0	0	\$ 195,795.97
Transport	0	\$ 64,994.13	0	0	0	0	0	\$ 2,849.75	0	0	\$ 67,843.88
Other	0	\$ 34,800.61	\$ 3,129.80	0	\$3,505.22	0	0	0	0	0	\$ 41,435.63
	<u>\$1,471,191.94</u>	<u>\$1,670,725.48</u>	<u>\$ 3,129.80</u>	<u>\$ 555.23</u>	<u>\$5,527.98</u>	<u>\$13,426.59</u>	<u>0</u>	<u>\$263,780.61</u>	<u>0</u>	<u>\$84,191.62</u>	<u>\$3,512,529.25</u>
GOVERNMENT - PROVINCIAL											
Health	\$ 38,604.48	0	0	\$1,807.06	0	0	0	\$158,807.85	0	0	\$ 199,219.39
Tourism and Information	0	0	0	0	0	0	\$286,816.90	0	0	0	\$ 286,816.90
Treasury and Economics	0	\$ 73,267.81	0	0	0	0	0	0	0	0	\$ 73,267.81
University Affairs	0	\$ 31,525.02	0	0	0	0	0	\$ 3,584.33	0	0	\$ 35,109.35
Other	\$ 23,283.30	\$ 12,705.03	0	0	0	0	0	\$ 36.00	0	0	\$ 36,024.33
	<u>\$ 61,887.78</u>	<u>\$ 117,497.86</u>	<u>0</u>	<u>\$1,807.06</u>	<u>0</u>	<u>0</u>	<u>\$286,816.90</u>	<u>\$162,428.18</u>	<u>0</u>	<u>0</u>	<u>\$ 630,437.78</u>
GOVERNMENT - UNITED STATES	\$ 14,141.94	\$ 58,703.79	0	0	0	0	0	\$ 1,809.97	0	0	\$ 74,655.70
CORPORATIONS	\$ 18,441.75	\$ 15,007.27	\$ 4,994.73	0	0	0	0	\$142,321.07	0	\$ 48.50	\$ 180,813.32
FOUNDATIONS, ASSOCIATIONS, INSTITUTES AND SOCIETIES											
Ontario Heart Foundation	\$ 274,646.06	0	0	0	0	0	0	0	0	0	\$ 274,646.06
Ontario Mental Health	\$ 55,181.82	\$ 120,471.07	0	0	0	0	0	0	0	0	\$ 175,652.89
National Cancer Institute	\$ 375,578.87	\$ 5,809.57	0	0	0	0	0	0	0	0	\$ 381,388.44
Other	\$ 154,386.32	\$ 67,946.46	\$160,820.27	\$ 321.48	0	0	0	\$ 935.94 CR	0	0	\$ 382,538.59
	<u>\$ 859,793.07</u>	<u>\$ 194,227.10</u>	<u>\$160,820.27</u>	<u>\$ 321.48</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>\$ 935.94 CR</u>	<u>0</u>	<u>0</u>	<u>\$1,214,225.98</u>
INDIVIDUALS & BEQUESTS	\$ 203,536.57	0	0	0	0	0	0	\$ 77.98	0	0	\$ 203,614.55
ENDOWMENT	\$ 1,910.83	0	0	0	0	0	0	0	0	0	\$ 1,910.83
UNIVERSITY	0	\$ 73,640.51	0	0	0	0	0	\$ 5,679.15	\$14,115.92	0	\$ 93,435.58
OTHER	0	\$ 2,198.02	0	0	0	0	0	0	0	0	\$ 2,198.02
	<u>\$2,630,903.88</u>	<u>\$2,132,000.03</u>	<u>\$168,944.80</u>	<u>\$2,683.77</u>	<u>\$5,527.98</u>	<u>\$13,426.59</u>	<u>\$286,816.90</u>	<u>\$575,161.02</u>	<u>\$14,115.92</u>	<u>\$84,240.12</u>	<u>\$5,913,821.01</u>

THE UNIVERSITY OF WESTERN ONTARIO
SCHEDULE OF RESEARCH EXPENDITURES BY SOURCE OF FUNDS
FOR THE YEAR ENDED JUNE 30, 1970

Table XXIV

SOURCE OF FUNDS	FACULTY OF MEDICINE	FACULTY OF SCIENCE	FACULTY OF SOCIAL SCIENCE	FACULTY OF ARTS	SCHOOL OF BUSINESS ADMINISTRATION	ALTHOUSE COLLEGE	FACULTY OF LAW	FACULTY OF DENTISTRY	FACULTY OF ENGINEERING SCIENCE	GENERAL	TOTAL
GOVERNMENT - FEDERAL											
Canada Council	\$ 121.80	\$ 5,734.10	\$ 63,299.87	\$ 7,728.12	0	\$ 4,001.03	\$ 8,351.71	0	0	0	\$ 89,236.63
Defence Research Board	\$ 28,747.85	\$ 101,856.78	\$ 3,304.59	0	\$ 48.95	0	0	0	0	0	\$ 133,958.17
Energy, Mines & Resources	0	\$ 23,597.73	\$ 788.24	0	0	0	0	0	\$ 11,095.36	0	\$ 35,481.33
External Affairs	0	0	\$152,583.71	0	0	0	0	0	\$ 43,642.19	0	\$ 196,225.90
Medical Research Council	\$1,232,707.50	0	\$ 11,199.10	0	0	0	0	\$33,273.87	\$ 24,118.38	0	\$1,301,298.85
National Research Council	\$ 7,729.80	\$1,576,746.32	\$111,136.73	0	0	0	0	\$ 10.98	\$201,733.43	\$104,907.19	\$2,002,264.45
National Health & Welfare	\$ 149,239.73	0	\$ 27,210.07	0	0	0	0	\$ 4,359.23	\$ 3,655.37	\$ 1,330.05	\$ 185,794.45
Transport	0	\$ 64,240.68	0	0	0	0	0	0	\$ 6,245.37	0	\$ 70,486.05
Other	0	\$ 30,905.26	\$ 93.28	0	\$ 8,092.08	0	\$ 791.49	0	0	0	\$ 39,882.11
	<u>\$1,418,546.68</u>	<u>\$1,803,080.87</u>	<u>\$369,615.59</u>	<u>\$ 7,728.12</u>	<u>\$ 8,141.03</u>	<u>\$ 4,001.03</u>	<u>\$ 9,143.20</u>	<u>\$37,644.08</u>	<u>\$290,490.10</u>	<u>\$106,237.24</u>	<u>\$4,054,627.94</u>
GOVERNMENT - PROVINCIAL											
Health	\$ 29,134.38	0	0	0	0	0	0	\$18,576.97	\$ 89,049.17	0	\$ 136,760.52
Tourism & Information	0	0	0	0	0	0	0	0	0	\$331,498.78	\$ 331,498.78
Treasury & Economics	0	4.98	\$ 48,132.83	0	0	0	0	0	0	0	\$ 48,137.81
University Affairs	\$ 1,550.00	\$ 28,528.33	\$ 371.16	0	0	0	0	0	\$ 1,165.67	0	\$ 31,615.16
Other	<u>\$22,841.29</u>	<u>\$836.22</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>\$ 23,677.51</u>
	<u>\$53,525.67</u>	<u>\$ 29,369.53</u>	<u>\$ 48,503.99</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>\$18,576.97</u>	<u>\$ 90,214.84</u>	<u>\$331,498.78</u>	<u>\$ 571,689.78</u>
GOVERNMENT - UNITED STATES											
	\$ 38,641.41	\$ 29,271.31	\$ 735.33	0	0	0	0	0	0	0	\$ 68,648.05
	\$ 16,950.05	\$ 15,567.75	\$ 22.02	0	\$53,888.41	0	0	0	\$149,029.98	\$ 178.27	\$ 235,636.48
CORPORATIONS											
FOUNDATIONS, ASSOCIATIONS, INSTITUTES AND SOCIETIES											
Ontario Heart Foundation	\$ 191,222.59	0	0	0	0	0	0	0	0	0	\$ 191,222.59
Ontario Mental Health	\$ 54,049.76	0	\$ 69,601.29	0	0	0	0	0	0	0	\$ 123,651.05
National Cancer Institute	\$ 397,334.43	\$ 199.93CR	0	0	0	0	0	0	0	0	\$ 397,134.50
Other	<u>\$192,179.64</u>	<u>\$ 32,809.54</u>	<u>\$ 5,953.66</u>	<u>0</u>	<u>\$168,082.68</u>	<u>\$ 6,717.13</u>	<u>0</u>	<u>\$ 348.75</u>	<u>\$ 126.83</u>	<u>\$ 6,886.15</u>	<u>\$ 413,104.38</u>
	<u>\$834,788.42</u>	<u>\$ 32,609.61</u>	<u>\$ 75,554.95</u>	<u>0</u>	<u>\$168,082.68</u>	<u>\$ 6,717.13</u>	<u>0</u>	<u>\$ 348.75</u>	<u>\$ 126.83</u>	<u>\$ 6,886.15</u>	<u>\$1,125,112.52</u>
INDIVIDUALS & BEQUESTS											
	\$ 128,387.26	0	0	0	0	\$ 300.00	0	0	\$ 887.97	0	\$ 129,575.23
ENDOWMENT											
	\$ 27,185.54	\$ 5,230.25	0	0	0	0	0	0	0	0	\$ 32,415.79
UNIVERSITY											
	0	\$ 38,545.98	\$ 48,368.06	\$14,071.49	0	\$35,778.54	0	0	\$ 10,480.05	0	\$ 147,244.12
OTHER											
	0	\$ 1,911.36	\$ 660.19	0	0	0	0	0	0	0	\$ 2,571.55
	<u>\$2,518,023.03</u>	<u>\$1,955,586.66</u>	<u>\$543,460.13</u>	<u>\$21,799.61</u>	<u>\$230,112.12</u>	<u>\$46,796.70</u>	<u>\$9,143.20</u>	<u>\$56,569.80</u>	<u>\$541,229.77</u>	<u>\$444,800.44</u>	<u>\$6,367,521.46</u>

AGENDA ITEM -

4. Other Matters

- (b) *Outline of the University's policy on the obligations of individual faculty members.*

The present policy of the University on contractual obligations of individual Faculty members is given in the accompanying consolidation of minutes of the Board of Governors. The policy is currently under active review by a Senate sub-committee.

REMUNERATION OF FULL-TIME MEMBERS OF THE UNIVERSITY STAFF

General

Any person holding a full-time university teaching or research or administrative appointment is considered to be responsible to the University on a 12-month basis. Graduate students regularly enrolled as candidates for advanced degrees, and who hold teaching or demonstratorship positions, are considered to be engaged in a full-time program for the term of their appointment.

Teaching at Other Institutions and Activities During the Academic Year

The holder of a full-time university teaching appointment shall not engage in teaching activities at any other institution during the academic year (September 1st to June 1st), unless specifically authorized to do so by permission of the Board of Governors, based on the recommendation of the Dean of the Faculty, College or School of which he is a member. Nor shall he undertake outside consulting activities or other employment during the academic year without specific permission of the Dean concerned. It shall be understood that outside assignments undertaken during the academic year shall not interfere with the Faculty member's teaching performance and shall be such as will further the academic prestige of the University and of the individual concerned.

Summer School and Extension

The foregoing general regulations, however, shall not affect, except as hereafter specifically outlined, the accepted practice of teaching for extra compensation at this University in summer sessions or extension classes for which tuition is charged, or elsewhere at summer sessions, provided that such compensation shall, if paid by this University, be authorized by formal action of the Board of Governors, and provided that any appointment at another institution shall be reported in writing to the Dean of the Faculty, College or School concerned and approved by him.

The above regulations likewise shall not prevent the giving by members of the full-time teaching staff occasional lectures outside the University, if such lectures do not interfere with normal University duties, nor a series of special lectures in another University, if reported to and approved by the Dean of the appropriate Faculty, College, or School, nor a course in the Extension Department under the auspices of the University when reported to and approved by the Dean of the appropriate Faculty, College or School.

The President, the Vice-Presidents, the Dean of a Faculty, College or School of the Constituent University, the Registrar, the Comptroller, and the Superintendent of Buildings and Grounds shall not engage in Summer School or Extension teaching on a remunerative basis. The Director of the Summer School and Extension Department, the Librarian, the Assistant Librarian, the Dean of Men and the Dean of Women, however, may engage in Summer School or Extension teaching, in their capacities as members of the teaching staff of an academic department, on a remunerative basis.

In a few instances, the terms of appointment and for salary arrangements preclude the members of staff from receiving additional remuneration from the University for extra teaching or administrative assignments.

Extra Compensation from University

It is expressly understood that persons holding full-time appointments in teaching or research at this institution are not entitled to payments from the University of salary, wages, consulting fees, or other compensation in excess of their regular salaries unless such excess payments are specifically authorized by vote of the Board of Governors. During the academic session (September 1 - May 31) such payments normally will not be authorized.

It is further understood that holders of full-time teaching appointments may receive extra compensation during the summer months (June 1 to August 31) for work carried on under established research contracts or special teaching assignments within the University, but that such individuals shall be restricted as to compensation by the general ruling that it shall not exceed 30% of their annual basic salary currently in force at the time payments commence or \$3,500.00 whichever is the greater.

Any payment from such research grants, contracts, etc., shall be under such terms and conditions as may be determined by the Dean of the Faculty, College or School concerned after consultation with the Head of the Department involved.

This regulation may be revised from time to time, but twelve months' notice of any amendment will be made.

Outside Work and Consulting Activities

Participation on the part of full-time Faculty members in assignments outside the University which bring them into contact with governments, business, and industry is regarded as desirable. The experience gained in such contacts may well be considered of value in the development of teaching ability within the University.

It is in the best interests of the University that all staff members submit in writing to the Dean, all proposals, including the nature of the proposed work, the time involved, the remuneration, etc., for undertaking outside assignments. It will be recognized that certain proposals may have advantages both to the University and to Faculty members and yet may have the effect of withholding them from still more constructive activities. This aspect of the question will also be related to the health and physical powers of the Faculty member. It is at all times essential that a Faculty member conduct his outside activities in a manner which will not improperly involve the University.

All full-time members of the staff should be fully aware of the necessity for adhering to the general limitations which must be established for the University as a whole, both in connection with the matter of compensation and time consumed. Accordingly, any assignment proposed to be undertaken by a Faculty member, and authorized by the Dean, should be undertaken with full regard to the following:

- (a) During the academic session (September 1 - May 31), the acceptance of consulting work, or any type of extramural assignment, must not interfere with a Faculty member's teaching performance. It is recognized that under normal circumstances not more than three days per month away from normal teaching, research or other University responsibilities, shall be devoted to outside work.
- (b) With respect to outside work undertaken during the summer months (June 1 - August 31), the following arrangements shall apply:
 - (i) Faculty members are free to undertake useful assignments for compensation during this period, with the understanding that Faculty members shall accept the principle that such assignments be cleared in the normal course through the Dean's office, and that such assignments shall be accepted only after it has been determined that the services of the staff member during the period involved will not be required by the University.
 - (ii) While recognizing the value of participating in teaching in other Schools or Universities, this type of activity may be undertaken only with the specific approval of the Dean.

This statement is a consolidation of a minute of the Board of Governors of 15 April, 1954, as amended by a minute of 15 March, 1963, confirmed by the Board on 12 December, 1969, and further amended on 22 May, 1970.

AGENDA ITEM -

4. Other Matters

(c) *Other matters - to be outlined at the discretion of the University.*

As mentioned under Item 3. (a)(ii) a Senate Committee has recommended that the London Teachers' College and Althouse College of Education be integrated and reorganized into a Faculty of Education within the constituent University.

Appended is :

- (i) A Report Entitled "A Faculty of Education in the University of Western Ontario" prepared by Dr. Ernest Stabler, Dean of Althouse College of Education, and
- (ii) A Study of Space in Althouse College and London Teachers' College.

A FACULTY OF EDUCATION IN
THE UNIVERSITY OF WESTERN ONTARIO

Ernest Stabler, Dean of Althouse College

The Report of the Senate *Ad Hoc* Committee on the Integration of London Teachers' College, dated June 30, 1970, recommends the development of a Faculty of Education that would integrate the work of both Althouse and London Teachers' College within the University. If the Minister of Education and Senate and Board of Governors of the University give their approval to this proposal, and if the Department of University Affairs provides adequate support, new and promising developments in teacher education may be possible.

The relationship between a society and its universities is delicate, complex and often uneasy. As one of the several components of a system of education the university, together with the schools, is responsible for transmitting knowledge to the young and inducting them into established society. This is the university as a social institution performing its tasks of preservation and socialization; it is the static or conservative aspect of its role, and if it limits itself to this function alone, it will grow outdated and intellectually flabby.¹

The other and more dynamic function of the university is associated with the development in students not simply of an acceptance of social institutions but a critical capacity by which to judge them. It is a concern not only for the transmission of knowledge but the generation of new knowledge. These two elements, the conservative and the progressive, are the source of a university's inner tension, and if kept in reasonable balance through tolerance and understanding, this tension can be the spring of great creativity. The play of these two forces also defines the relationship that exists between the university and its community: it prepares the young for life in society, but at the same time it serves as a critic of that society. The extent of its service to society may well be judged by the quality of its criticism, and the effectiveness of its teaching may be determined by the extent to which it is informed through research.

A Faculty of Education

A Faculty of Education is a university writ small, a Little University, or a Professional University. It too has its social function in preparing teachers for the "real world" of the existing school system. (They may or may not fall into an acceptance of the educational *status quo*.) It transmits to its students what is currently known about instructional strategies and techniques, theories about the way children learn, and it involves them in philosophic issues and historical perspectives. Through periods of teaching practice it reveals to its

1. See The University, Society and Government, The Report of the Commission on the Relations Between Universities and Governments, University of Ottawa Press, Ottawa, 1970.

students the current state of the schools and apprentices them briefly to competent teachers. All of this is the primary and indispensable role of a college or faculty of education. But it is not enough.

The dynamic and progressive elements of criticism and research are also necessary. When the "critic of society" aspect of a university is translated into the life of a Faculty of Education the results take a variety of forms: a constant examination of the role of the school and its objectives in the light of individual and social needs; a continuing search for ways to facilitate learning; a relentless effort to raise, by given criteria, the quality of the teaching profession - to name only a few. Criticism must, of course, be accompanied by research or research-and-development that will generate new data and insights, and suggest new strategies and techniques. This research will lead us into all kinds of places: into a network of relationships with the schools, into the new technologies, possibly into other cultures, and certainly into faculties other than our own.

There will be a genuine tension between the "training of teachers" or service element and the "criticism and research" aspect of our function, but this tension can be productive if we are prepared to accept both elements and admit that each is legitimate. This tension will be the source of our dynamic relationship with "society" - in our case, the children, teachers and administrators of the schools, the professional organizations of teachers, the Department of Education, in short, the various components of the system of education in Ontario. Our relationships with these several publics will take many forms, some of which are yet to be discovered. There is a direct and creative relationship between our work in educating teachers and the extent and depth of our participation in research, curriculum development, publication, and our activity on professional bodies. The extent to which we are in the vanguard of educational reform and not in its tow is one measure of our effectiveness as teachers of teachers.

The Education of Teachers

Our first concern should continue to be the initial preparation of teachers and it is the Diploma Program that will claim the major share of our time and energy. It should also provide the deepest challenge to our teaching ability and administrative imagination. If the Report of the *Ad Hoc* Committee is accepted, we may assume that the majority of the staff of London Teachers' College will become members of the proposed Faculty of Education, and will contribute to the field of elementary teacher education, their very considerable experience and ability. The aim should, of course, be full rather than token integration. If London Teachers' College continued to be the centre for elementary teachers and Althouse the focus of secondary teacher training, few, if any, advantages of integration would be achieved. If, however, the two staffs are integrated into one Faculty and assigned appropriately within a departmental structure, and the two buildings used jointly under a carefully prepared use-of-space plan, genuine integration may result.

A College or Faculty of Education should, among the components of a university, strive hardest for excellence in teaching. Ideally, it should be the very model of a good learning environment. We know, of course, that such imagery is a shade utopian, but we also know in down to earth, everyday terms that we are not as effective as we might be. And if we don't realize our shortcomings our

students certainly will; as they are selected more rigorously they will become more critical.

The growing complexity of society and the need for solutions to the terrifying problems of our time call for longer, not shorter periods of professional training, and more intensive training as well. Teaching is a case in point. Modern trends in education make more, not fewer, demands on the teacher. Consider the arrival of the non-academic student in the secondary school and the search for a curriculum that matches his ability and interest. Or take the "structuralist" concept, under which the teacher's job is to guide the pupil to discover the structure of the subject and the body of principles, concepts and methods that it contains. This kind of teaching makes far greater demands on the teacher's intelligence, scholarship and ingenuity than do more routine practices. To teach in this way the teacher must have a deeper understanding of both the subject and the child. When Jerome Bruner in his often-quoted statement says "any subject can be taught effectively in some intellectually honest form to any child," our reply can only be "Amen, but can it be taught by any teacher?"

The irony is that these developments in educational theory and practice have come, in Ontario, at a time of major population growth. The education explosion has been accompanied by the population explosion and as one demanded better qualified teachers the other made it difficult to find enough teachers. The crises of shortage are now about over, and we can concentrate on improving the quality of the teaching force. But the attitudes of our students may make it necessary for us to make it unmistakably clear that teaching in today's schools imposes heavy demands.

It is time that teacher education broke out of the hold that has imprisoned it in this Province for generations. The shape and pattern of the one-year post baccalaureate program has changed little through the years, and with the creation of new colleges and faculties of education the time and opportunity for change has come. As we break out of the mold we can expect to see new patterns in one-year consecutive programs and the launching of undergraduate concurrent programs. At this university we will begin to discover our uniqueness and our particular strengths. Whether these will lie, for example, in our approach to philosophy courses, a unique design for training elementary teachers, a resource centre in the field of history and the social sciences, an international and intercultural emphasis, a leadership role in training technical and vocational teachers, the realization of the potential of the Learner Centre Project, or in other directions now seen dimly or not yet visible, it is too early to tell. But we should be consciously exploring ways to develop particular programs and special features for which we are well qualified - and for which there is a genuine need.

In Service Education and Curriculum Development

These two aspects of our work are organically related. In most of the professions it is generally agreed that no one can expect to complete initial preparation, enter the profession and practise it successfully for forty years without further training. Teachers, particularly the good ones, accept this and both the quality and quantity of our work with experienced teachers is among the best things we do. And it will grow in the years ahead. We also need to offer

various patterns and formats such as the week-end workshop, the Saturday morning series, the short summer course which carries no credit and gives no certificate, and, of course, graduate programs for which we now have a cogent and well-documented proposal.

For years the Althouse Faculty have in one way or another worked in the field of curriculum development either on Department of Education or local school committees, but this work has seldom centred in the college. With the decentralization of responsibility for curriculum change from the Department of Education to county and municipal boards of education and local schools, the need for local and regional leadership becomes evident. This may be an area in which we can work cooperatively with local boards. Consider, for example, the development of a course for Grade Eleven to be known as Indian Studies. Assume that twelve schools in Western Ontario were prepared to send two of their teachers for a solid month with us next summer. These teachers would work with a team drawn from Indian leaders, Althouse Faculty, Department of Education consultants, high school teachers, and U.W.O. History Department professors, and together they would build the framework and select the materials of a course. And as the teachers became immersed in content they would develop teaching strategies. During the school year they would teach the course on a trial basis and continue to consult with the team. The following summer they would meet again for review and evaluation. The result would be a new understanding of Indian culture for at least 500 students each year, and a group of teachers who had grown on the job. The continuing education of teachers through curriculum development may take other forms and these need to be explored, but it is an area of central importance for a Faculty of Education. It is one of the means by which the Faculty can work more closely with the schools with a view to modifying the *status quo* and participating in innovation and reform. It is indeed an avenue through which we can exercise the critical function of a university.

Research, Development and Publication

To Alfred North Whitehead the term Profession meant "an avocation whose activities are subjected to theoretical analysis, and are modified by theoretical considerations derived from that analysis. This analysis has regard to the purpose of the avocation and the adaptation of the activities for the attainment of those purposes."² If our main purpose lies in the training of professionals we can hardly escape a theoretical analysis of the purposes and activities of the teaching profession. When an analysis takes on a systematic form that involves reflection and synthesis, it becomes research. The scope of our research may range over broad boundaries. It may be oriented basic research that attempts to deepen a particular segment of knowledge (Bishop Strachan's influence on educational developments in Upper Canada) or applied research that aims primarily at the solution of a practical problem (severe reading disabilities). It may relate to the teaching of history in the schools or the teaching of comparative education at Althouse, and it then spills over the boundaries of research and becomes Research and Development. If it involves the creation of a new course in French and the testing of it in the schools, it becomes less of a research and more of a development project but this too involves an analysis of the purpose and the activities of teaching.

2. A. N. Whitehead, Adventure of Ideas (New York: MacMillan Co., 1961) p.72

Clustered around the "dynamic pole" of a university's function I would also place publication. This too may range widely and include a report on research findings, a textbook in chemistry, an analysis of learning theory, or a guide to the teaching of poetry.

Our research and development projects and publications are a part of the dynamic and progressive as distinct from the transmitting and preserving function of a Faculty of Education. They may generate new knowledge or new techniques of teaching, they may provide a critical interpretation of present theory and practice in education, and they should penetrate and enliven our own teaching. Indeed without such enterprise we could become locked into the *status quo*.

All members of the Faculty will not, of course, become equally involved in the several functions proposed above. Our inclinations and talents are far too variable for that. Some will concentrate more on the Diploma Program, others will be active in graduate studies and in-service training, and the emphasis on research and development and publications will certainly vary among both departments and individuals. The result will be a pluralistic community with a diversity of aims and activities. And yet, within that diversity, there can be coherence and integration because the activities are related to each other: research to teaching, curriculum development to further professional study, and teacher education to changes in teaching and learning. But unity within diversity can flourish only in a climate in which those who support the different aspects of a university attempt to understand and tolerate each other. We are bound to have tensions, and they may tear us apart or neutralize our effectiveness, or they may become the source of a new creativity.

STUDY OF SPACE IN
ALTHOUSE COLLEGE AND LONDON TEACHERS' COLLEGE

1. Preamble

Althouse College has an assignable area of 91,055 square feet and London Teachers' College has an assignable area of 39,922 square feet; to this must be added a new twin-classroom portable with an assignable area of 1,600 square feet. This spells a total of 132,577 square feet. Assuming an enrolment of 1200 students in the Diploma program, this represents a basic unit of 110.4 square feet per student.

2. Positive Features

Althouse seems to be better equipped in the area of laboratory type rooms for the teaching of Science (3 labs.); Business and Commerce (2 labs.); Vocational and Occupations (5 labs.); Home Economics (2 labs.); Music (suite); Languages (1 lab.). It also has two large lecture rooms with a seating capacity of 150 plus in each. Althouse has a predominance of seminar-type rooms cum offices (39) which can accommodate 15 to 18 students in each one.

London Teachers' College is well equipped with standard type classrooms for the teaching of Arts, Social Science and Foundation subjects, i.e. (19) regular classrooms with a seating capacity of 35.

Gymnasium and related rooms:	ACE	10,337 sq. ft.	
	LTC	6,762 "	"
Auditoriums:	ACE	6,534 "	"
	LTC	6,370 "	"
Library:	ACE	10,920 "	" (total area)
	LTC	4,275 "	"
Cafeteria:	ACE	5,131 "	"
	LTC	3,010 "	"
Administration:	ACE	Main Office, Registrar, Practice Teaching, Typing Pool - 3,110 SQ.FT	
	LTC	Main Office Area - 1,100 sq. ft.	

3. Areas of Needs

We feel that it is difficult to estimate projected space needs without an adequate knowledge of the structure of the anticipated Faculty of Education and of its program of course offerings. We wish to emphasize, however, that if a true integration is to be effected, every possible measure should be taken to integrate the two buildings which are to house the new Faculty. It is

necessary that both buildings be altered so that they meet **current** University standards before they are officially turned over to the University.

A close examination of both buildings presently known as London Teachers' College and Althouse College, reveals certain shortcomings which will have to be remedied in order to meet the changing needs of Teacher Education. The plans of both colleges also indicate a lack of adequate accommodation for those areas of the program not considered in the original planning or introduced after the erection of the buildings had been completed; School Librarianship, Data Processing, Visual Aids, are but a few examples of such oversights.

In order to remedy this situation and meet present or anticipated needs, two plans may be considered:

- (a) Major alterations to presently existing buildings
- (b) The erection of a new building on University-owned land (the Powell Property). This new building could fulfil the function of housing all the departments and services common to both buildings. It will also be necessary to construct walkways between buildings and an underpass across Sarnia Gravel Road in order to communicate with LTC.

Areas for which provisions are necessary, either through alterations and/or a new building:

1.	(Library addition	15,000 sq. ft.
	(School Librarianship	2,220 sq. ft.
	(Data Processing	5,210 sq. ft.
	(Visual Aids Centre	6,500 sq. ft.
2.	Addition to LTC Cafeteria	150 sq. ft.
3.	Office Space (new)	7,200 sq. ft. (60 offices 12' x 10')
4.	Storage	3,500 sq. ft.
5.	Central Typing & Duplicating	2,400 sq. ft.
6.	Open Classroom Complex	3,000 sq. ft.
7.	Learner Centre	5,000 sq. ft.
		<hr/>
		50,180 sq. ft.

